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Examiners' Report
June 2017

GCE Psychology 8PS0 02

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June 2017

Publications Code 8PS0_02_1706_ER

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Introduction

Candidates for the most part attempted all elements of this paper with no question specifically not being answered. In general, candidates' coverage of questions within both biological and learning psychology was good in terms of all skill requirements, although knowledge and understanding of some areas did vary. Candidates seemed to manage their time well and usually attempted all questions, including the longer essay ones.

In terms of questions that required an application to a context there was some success; however, as in previous series, this did limit some candidates' responses, especially those who provided purely generic answers. Within some candidates' answers they failed to complete the A03 part of their answer in terms of justification, quite often the identification mark was awarded but additional credit could not be given if this was not elaborated further. This was true not only in terms of strengths and weaknesses of method-based questions but also those focusing on theories.

In terms of longer responses, candidates' answers were generally well attempted with evidence of an increasing awareness of the requirements of "evaluate" questions, including at times reference to conclusions. Candidates who achieved higher marks, supported their answers with evidence from research studies, therapies and theories, amongst other points.

Candidates would benefit from knowing clearly what is required from the different command verbs in order to support their understanding of what the question is asking.

Question 1 (a)

The majority of candidates' answers focused on Brendgen or Gottesman and Shields, with very few other twin studies being used. Accuracy in candidates' answers depended on how well they knew the procedure of their chosen twin study. Answers mainly focused on how they acquired samples, methods used - quite often referencing in clear and accurate examples of what was used, the time scale, how zygosity was measured, amongst other credible points. Some candidates did not read the question in terms of procedural criteria and provided results, aims and often conclusions to the twin study they were answering - which were not creditable. A minority of candidates wrote very generic answers about twin studies in general, with some writing about adoption studies.

Answer ALL questions.

SECTION A: BIOLOGICAL PSYCHOLOGY

- 1 (a) Describe the procedure of **one** twin study that you have learnt about in biological psychology.

(4)

Name of study Gottesman & Shields

Gottesman & Shields were investigating whether genetics played an important role in schizophrenia. He ~~did~~ carried out qualitative research by acquiring knowledge about 57 twins. He found out information about the twins through hospital records and personality tests to see whether genetics had any contribution to schizophrenia. Gottesman and Shields concluded that there was a 47% concordance rate of MZ (monozygotic twins) and a 9% concordance rate of DZ (dizygotic twins) which proves that genetics did in fact have an ^{important} role in schizophrenia.



ResultsPlus Examiner Comments

This response gained 1 mark. The candidate begins their answer with an aim which is not part of the procedure. A mark is awarded for knowledge of information from the hospital records onwards. The end part of the answer refers to results and conclusions which again does not gain any marks.



ResultsPlus Examiner Tip

It is important that candidates read the question carefully in terms of what it is asking, for example, "procedure", in order to be able to access full marks.

Answer ALL questions.

SECTION A: BIOLOGICAL PSYCHOLOGY

- 1 (a) Describe the procedure of **one** twin study that you have learnt about in biological psychology.

(4)

Name of study Brendgen et al. (2005)

The researchers followed the records of MZ and DZ twins from an ongoing longitudinal study. They then got informed consent from the parents and went to ask the teachers and peers of the 5-year-old twins to rate them on their physical and social aggression. The peers were asked to select the 3 children who were most likely to do a specified behaviour (e.g. get into fight, tell mean secrets about another child) out of a series of photos of their classmates. The teachers were asked to rate the twins on a 3-point scale on how likely they were to do a specified behaviour. The results for social and physical aggression were added up separately.



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Examiner Comments

This response gained 3 marks.

The candidate provides three clear knowledge points from a correct twin study. They provide knowledge of informed consent from the parents, which is correct for this study. The candidate then gains one mark each for the two rating scales. The candidate clearly knows their twin study and is able to provide procedural elements - a fourth mark is not awarded, as neither the beginning nor the end points have enough detail for credit.

Question 1 (b)

Many candidates were able to grasp the A01 mark for identifying a strength and weakness of the twin study they had learned about in biological psychology. The most common answers for Brendgen's study focused on the strength on using two rating scales and used sample problems of this study for the weakness. For Gottesman and Shields (1966) the strength most commonly related to testing for zygoty and the weakness to sampling issues with the twin sample. For many answers there was a lack of justification which resulted in candidates only receiving partial marks for the strength and/or weakness. In some cases, candidates provided generic answers of twin studies not focused on what they had provided in part (a) which resulted in no marks being awarded. This could indicate that candidates did not fully know their twin study in the depth needed to evaluate it in terms of a strength or weakness or they may have been unfamiliar with the necessity to provide a strength and weakness of a twin study. Candidates also, at times, provided inaccuracies in terms of their A01 knowledge from the study, for example, when referring to sample size, country of origin and type of data gathered, amongst others. This quite often then transferred into an incorrect justification, again limiting marks that candidates could access across the strength and weakness.

(b) Explain **one** strength and **one** weakness of the twin study you have learnt about in biological psychology.

(4)

Strength

A strength of Brendgen is that it has ^{high reliability} ~~low~~ generalisability. This is a strength because the procedure and the questionnaire used were standardised therefore making the experiment easily replicable. This shows that the same questions were used for everybody making it reliable.

Weakness

A weakness of Brendgen is that it has low population validity. This is a weakness because the sample only consisted of 6 years olds. This shows that the results cannot be generalised to anyone other than 6 year olds and therefore restricts the experiment as a 6 year old and a 20 year old aren't the same.



ResultsPlus Examiner Comments

This response gained 4 marks.
The strength provides reference to Brendgen's study in terms of identification of A01 knowledge about the questionnaire used, which the candidate goes on to justify in terms of it being standardised and easily replicable for a second mark. The weakness is also worth two marks, there is clear identification in terms of the sample of 6-year-olds used in Brendgen's study and this is justified in terms of a lack of generalisability to others apart from 6-year-olds, for the second mark.

(b) Explain **one** strength and **one** weakness of the twin study you have learnt about in biological psychology.

(4)

Strength

From twin studies you can tell if something is from nature or nurture. If Monozygotic twins share it its most likely genetic but if all siblings share it its most likely due to environment.

Weakness

It's not generalisable to the whole population as only a small percentage of people have a twin either MZ or DZ.



ResultsPlus Examiner Comments

This response was not awarded any marks.
Both the strength and weakness are generic, there is no clear identification of which twin study the candidate is referencing in their answer so they cannot gain any credit.



ResultsPlus Examiner Tip

Candidates would benefit from clear reference to their study in terms of identification marks within a question like this. This would then allow access to A03 justification marks of the actual strength and/or weakness they are trying to explain.

Question 2 (a)

(a) (i)

Most candidates were able to identify the correct sampling method used by Hinnah in her study. For a minority there was some confusion with opportunity sampling.

(a) (ii)

Many candidates struggled to gain full marks for this question. Lots of candidates correctly identified and justified a strength/weakness of the sampling method used; however, many did not apply this to Hinnah's study and therefore credit was limited. Many answers focused clearly on strengths and/or weaknesses of volunteer sampling, including reference to practical explanations, lack of representation and type of sample that could come forward, in addition to other points - however, most often these were not linked to Hinnah's study in any way. There were also a number of inaccuracies in terms of strengths and weaknesses for volunteer sampling, in addition to evaluation points not focusing on volunteer sampling, that were included in candidates' answers.

- 2** Hinnah is interested in finding out if there is a relationship between drug taking and aggressive behaviour. To investigate this, she puts posters up around her college on Wednesday asking for people interested in participating in the study to attend a meeting on Friday lunchtime. Ten participants attended her meeting and gave self-report data on how many times they consumed drugs each week and how aggressive they were on a scale of 0 to 100.

(a) (i) Identify the sampling method used in Hinnah's study.

(1)

volunteer sampling.

(ii) Explain **one** strength and **one** weakness of using this sampling method for Hinnah's study.

(4)

Strength

The participants are willing to take part in the study so are giving informed consent. They are ~~not~~ being forced to take part.

Weakness

The participant pool may be bias as they are all from her college and will be around the same age.



ResultsPlus

Examiner Comments

The response for (a)(i) gains 1 mark. The candidate correctly identifies the correct sampling method used by Hinnah in her study.

The response for (a)(ii) also gains 1 mark. The candidate scores 0 marks for the strength, there is no identification of volunteer sampling in terms of Hinnah's study - the answer is generic. The weakness scores 1 mark in terms of the sample coming from her college, justification gains no marks as there is a lack of development in the candidate's answer.



ResultsPlus

Examiner Tip

Candidates would benefit from additional skill work on justification of strengths and weaknesses. Also, when asked, candidates need to make clear reference to the scenario within their answers; this will allow them to access A02 identification marks.

Question 2 (b)

The majority of candidates were able to follow the instructions in the question and clearly identify the "outlier" on the graph. Nearly all of the candidates who got this question correct followed the instruction in the question to "circle" the outlier. A minority of candidates failed to circle anything on the graph.

(b) **Figure 1** shows a scatter diagram with the results of Hinnah's correlational study.

Scatter diagram to show the relationship between the number of times drugs were taken per week and aggression score (out of 100)

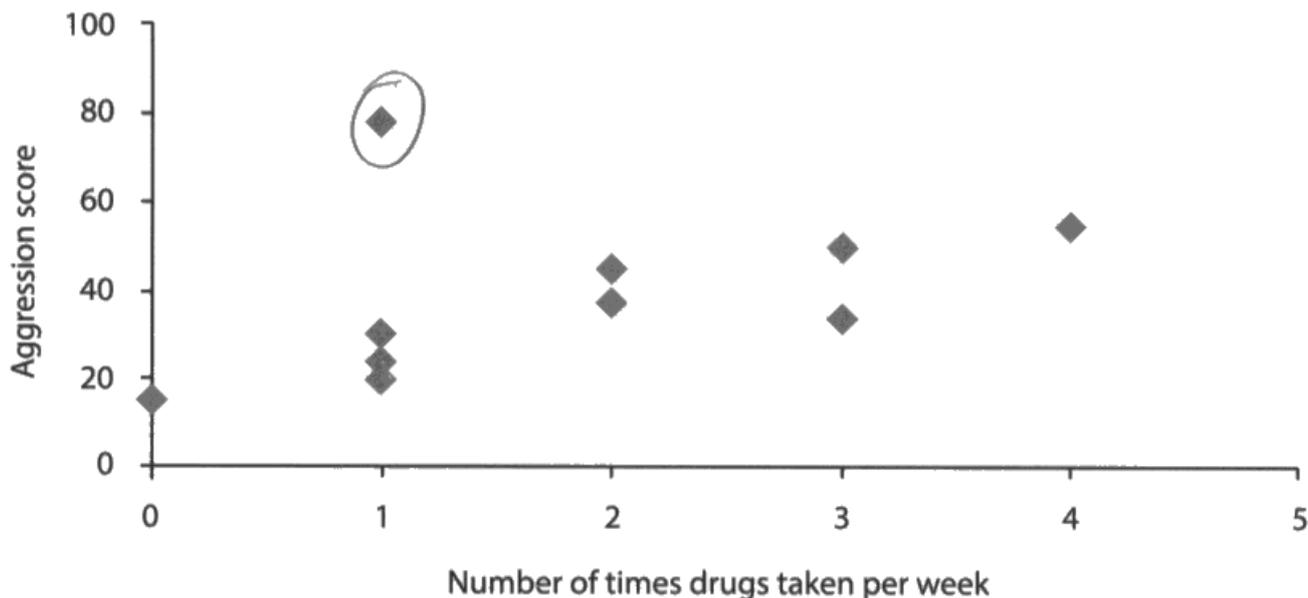


Figure 1

Using **Figure 1**, identify the anomaly (outlier) on the scatter diagram by **circling** the relevant data point.

(1)



ResultsPlus
Examiner Comments

The candidate gains 1 mark.

The candidate clearly circles the correct "outlier" result on the graph.

Question 2 (c)

Most candidates were able to identify an appropriate conclusion for Hinnah's study. Many candidates referenced accurate key terms within their answer such as positive correlation or used key language from the material provided, for example, "number of times drug was taken per week". Weaker candidates provided results as their answer therefore gaining 0 marks. Repetition within conclusions meant that only one mark could be accessed by some. Formulating a justification of their conclusion did prove challenging, again for some there was repetition in their answers.

(c) Explain **one** conclusion Hinnah could make from the results in the scatter diagram.

(2)

A conclusion of this graph would be that the more times taken a week the higher the aggression score.



ResultsPlus Examiner Comments

This response gained 0 marks. The candidate has failed to identify an appropriate conclusion for one mark. They infer that there is a higher aggression score but they do not say clearly what is influencing this, "the more times taken", what is taken?



ResultsPlus Examiner Tip

Candidates need to ensure that they do not repeat what they have already stated in conclusion questions that ask for 2 marks. They need to ensure that their answer is a justification of what they have already suggested in their identification of a conclusion in order to access the second mark.

(c) Explain **one** conclusion Hinnah could make from the results in the scatter diagram.

(2)

Overall there is a ~~very slight~~ positive correlation between ^{the} number of times drugs are taken per week and aggression score. ~~as there is a~~
So her conclusion would be that drugs do have an effect on aggression as the higher the number of drugs you take per week, the higher your aggression score will be.

(Total for Question 2 = 8 marks)

However we cannot say that drugs alone cause aggression and correlations just mean that there is a relationship between the two variables, not that drugs cause aggression.



ResultsPlus

Examiner Comments

This response gained 2 marks

In the first sentence, the candidate identifies an appropriate conclusion that Hinnah could make from the results in the scatter diagram. They go on to justify this conclusion by making reference to drugs affecting aggression which gets them a second mark. The last sentence does not gain any credit as two marks have already been awarded.

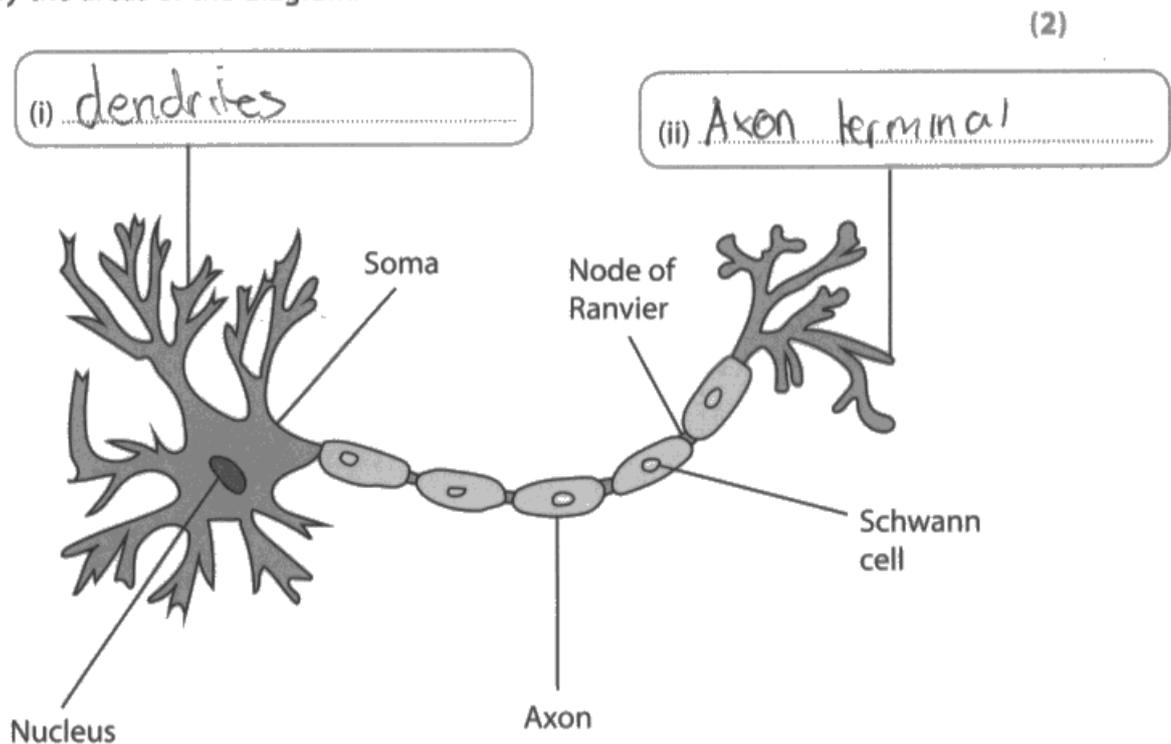
Question 3 (a)

(a) (i) and (ii)

The majority of candidates answered this question correctly. Part (a)(i) was mostly identified as dendrites. For part (a)(ii) there was a variety of acceptable answers, although this was not answered as accurately as part (i), it was nevertheless answered well by many candidates. Some candidates mixed the two parts up so gained 0 marks. A minority of candidates did not answer this question at all or only part answered it, gaining 1 mark if they were correct.

3 The diagram below shows a typical neuron.

(a) Identify the areas of the diagram.



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Examiner Comments

This response gained 2 marks for correct answers for both (a)(i) and (ii).

Question 3 (b)

Candidates' answers to this question varied in quality. The question required answers that focused on explaining the effects that recreational drugs may have on the transmission process in Tina's central nervous system. A minority of candidates provided answers that did not have any reference to the Tina scenario whilst others only referred to "Tina" within their answers, quite often focusing on drug addiction. Stronger candidates were able to use key terminology associated with recreational drug affects, going on to explain these and apply them to Tina/stress/her exams - or an alternative scenario focus. Many answers focused on the effects of dopamine on the central nervous system, quite often linked well to the scenario. Other recreational drugs commonly cited included nicotine, cocaine, heroin and alcohol.

(b) Tina begins taking recreational drugs as she feels stressed due to her forthcoming examinations. ✓✓

Explain the effects the recreational drugs may have on the transmission process in Tina's central nervous system. ✓✓

You must refer to the context in your response.

(3)

Neuronic transmission may become slower due to GABA increasing which due to drug consumption therefore neurotransmission becomes a slower process so Tina's reactions will slow down as her electrical signals / messages will be transmitted around the from the central nervous system to the ~~per~~ peripheral nervous system slower in order to carry out reactions.



ResultsPlus Examiner Comments

This response gained 0 marks. The candidate does not provide any clear reference to the scenario in terms of the effects that recreational drugs may have on the transmission process in Tina's central nervous system in relation to her stress/forthcoming examinations.

- (b) Tina begins taking recreational drugs as she feels stressed due to her forthcoming examinations.

Explain the effects the recreational drugs may have on the transmission process in Tina's central nervous system.

You must refer to the context in your response.

(3)

Recreational drugs hijack the working of the nervous system. They alter the brain function. The drugs might prevent the transmission of chemical messages from one synapse to another across the synaptic gap. For example, heroin influences the dopamine production. When the drug is taken, more dopamine is produced, which gives us a feeling of euphoria. Tina's body reacts (not being stressed) by decreasing its own production, so when the drug is no longer in your system, Tina has decreased level of dopamine and starts to feel stressed.



ResultsPlus Examiner Comments

This response gained 2 marks.

The candidate begins their answer with a generic explanation of recreational drugs and how they affect the transmission process, which is not clearly linked to the scenario. The example gains two marks for clear reference to heroin in terms of dopamine production making Tina feel euphoria and not being stressed and the absence of the drug influencing dopamine and Tina starting to feel stressed.



ResultsPlus Examiner Tip

This question required there to be a clear reference to the Tina scenario throughout candidates' answers. Candidates would benefit from ensuring that they embed within their answers key elements of the scenario which will support their responses in actually answering what the question requires.

Question 4

Most candidates attempted this question which focused on evaluating the use of brain scanning techniques to investigate human behaviour. Candidate responses varied in terms of skill application and knowledge of the scanning techniques commonly used in human behaviour. Better candidates' responses provided clear A01 in terms of PET, fMRI and CAT focusing on how they worked, the tracers used and the images they produced, amongst other credible knowledge. These candidates then went on to use this accurate knowledge in terms of evaluative points - common answers quite often did this in terms of each scanning technique. Alternative answers took clear knowledge of each scanning technique and evaluated this throughout their answer, making clear reference to the different scanning techniques as they produced their responses.

Those candidates who were awarded Level 1 or 2 marks tended to either provide answers without any accurate knowledge and understanding or produced evaluative statements with only some development, or they simply stated answers that were not explained. Imbalance was quite often evident within some candidates' answers in terms of weaknesses being more frequently used in addition to limited conclusions. A few candidates still showed preference for providing knowledge of all types of scanning techniques and then evaluating them in the second half - often not clearly referencing in A01 knowledge in the second half of their answers.

Answers commonly referred to Raine et al as supporting evidence for PET scanning which was credible; however this, for a minority, then became an evaluation answer for this study and was not specifically related to brain scanning techniques. They tended to then follow a "GRAVE" technique answer which did not meet the requirements of the question.

As a level based question it was important to consider that an A01/A03 response was required which needed an equal emphasis on knowledge and understanding versus evaluation and conclusion. Therefore those candidates who scored highly on both skills were able to demonstrate accurate and thorough knowledge and understanding of brain scanning techniques to investigate human behaviour. This A01 knowledge was usually embedded with a logical evaluation throughout their answers, not just in the second half. This, therefore, allowed candidates to demonstrate logical chains of reasoning throughout, displaying an awareness of competing arguments with a balanced conclusion. The most able candidates provided knowledge and evaluated through each statement or paragraph within their answer, allowing them to access quickly and efficiently the logical chains of reasoning throughout their answers which then usually resulted in a balanced conclusion.

4 Evaluate the use of brain scanning techniques to investigate human behaviour.

(8)

There are 3 types of brain scans - PET scans, CAT scans and fMRI scans.

PET scans are a good way to investigate human behaviour as PET scans show brain activity while the brain is being stimulated. PET scans are better at showing brain activity than fMRI and CAT scan as fMRI measures the change in blood flow and oxygenation while ~~CAT~~ scans show bones and tissue fluid. This therefore makes PET scans the best at showing brain activity.

fMRI scans however have a higher spatial resolution than PET scans meaning fMRI scans produce a clearer image for psychologists to then analyse the human brain from. This is therefore a strength as more elements of the brain can be seen and how human behaviour affects them.

A weakness of using brain scanning techniques ~~to~~ to investigate human behaviour however is that 2/3 of the brain scans are very harmful to us ~~as~~ (PET and CAT) as they emit radiation and PET can only be done 2-3 times a year for that reason. This is therefore a weakness

as it ~~may~~ limits how often scans can be made to examine Human behaviour.

~~Finally~~

To conclude while brain scanning techniques can be harmful, they give us a good insight into human behaviour and the brain that prevents surgical procedures. Therefore, I overall believe brain scanning techniques are a good way of investigating human behaviour.



ResultsPlus Examiner Comments

This response gained Level 2 - 4 marks.

The candidate begins their answer with an identification of different scanning techniques. They then go on to provide some knowledge and understanding of PET scanning in terms of stimulation. The second part of this paragraph takes this further in terms of embedding knowledge of scanning within an evaluative point - comparison with other scanning techniques and additional knowledge. The third paragraph provides an evaluative point about fMRI scans being clearer as they have a higher spatial resolution. The fourth paragraph provides a more general point about scans, which was a common theme in many candidates' answers, on radiation and harm caused. The candidate ends with a conclusion that is somewhat superficial.

Overall the candidate produced statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made.



ResultsPlus Examiner Tip

Candidates need to ensure that they have a balance within their answers in terms of evaluative elements which incorporate both A01 and A03 skills.

Question 5 (a)

Within their answers candidates were required to identify each reinforcer. Most candidates attempted this question, with many providing the correct primary and secondary reinforcers. A few candidates confused the terms primary and secondary, mixing up their answers and providing for example, cup-shaped stamps as the primary reinforcer and free hot drinks as the secondary reinforcer. A minority of candidates provided definitions for the terms primary and secondary reinforcer which were not credible.

SECTION B: LEARNING THEORIES

- 5 Jayne owns a cafe called Rainfall and wants to encourage people to continue to buy coffee from her shop. She decides to give her customers a card where they can accumulate cup shaped stamps when they buy a hot drink. Once Jayne's customers have been given 10 stamps they are given a free hot drink.

(a) Identify the primary reinforcer and secondary reinforcer in this scenario.

(2)

Primary reinforcer

Cup shaped free hot drinks

Secondary reinforcer

Cup shaped stamps



ResultsPlus

Examiner Comments

This response gained 2 marks. The candidate clearly identified free hot drinks as the primary reinforcer and cup-shaped stamps as the secondary reinforcer.



ResultsPlus

Examiner Tip

Candidates would benefit from learning key terms related to the different theories on the specification to ensure that all questions asked can be answered.

Question 5 (b)

This question proved challenging for some candidates in terms of following the instructions of the question. The question asked for a description of two schedules of reinforcement which Jayne could use to encourage her customers to buy drinks from her cafe. Candidates who achieved highest marks were able to identify each schedule of reinforcement and then go on to apply this to the Jayne scenario. For some, there was a lack of knowledge of schedules of reinforcement with some providing answers for different areas of the course. In addition, candidates who were unsure of their knowledge provided partial schedules of reinforcement within their answers or gave general answers of all schedules of reinforcement which were not clear. Many candidates gained marks for correct schedules of reinforcement applied to the Jayne scenario - showing a good understanding of A02 application.

(b) Describe how Jayne could use two schedules of reinforcement to encourage her customers to buy hot drinks from her cafe.

(4)
Jayne could use ^{a type of} partial reinforcement for instance fixed interval. If the customers come every week for a month then she could give them a hot drink. This would encourage her customers to come once a week and buy coffee for a month to get a free hot drink. ^{or any other hot drink}
Or Jayne could use ~~variable~~ fixed ratio so every three items they buy they receive a hot drink free which may encourage people to continue buying coffee from her shop.



ResultsPlus Examiner Comments

This response gained 2 marks. The candidate names two schedules of reinforcement but does not provide knowledge of each for a clear A01 mark, they then go on to apply their schedule of reinforcement in the context of the Jayne scenario with success, gaining 2 marks for this part of their answer.

(b) Describe how Jayne could use **two** schedules of reinforcement to encourage her customers to buy hot drinks from her cafe.

(4)

She could use positive reinforcement and praise her customers everytime they buy a drink from her shop. She could also use Token Economy where the customers can collect stamps which eventually lead to a free coffee. This will encourage people to go to her coffee shop and lead to reinforcement and repeated behaviour in exchange for a coffee. Also vicarious reinforcement where the customer can see how someone else gets rewarded from buying a coffee so is encouraged to repeat their behaviour to get the same reward.



ResultsPlus
Examiner Comments

This response gained 0 marks.

The candidate has not identified any schedules of reinforcement within their answer so cannot be accredited any marks.

Question 6 (a)

Most candidates were able to provide answers about their learning practical; there were a variety of practicals used by centres and for the most part it was obvious the areas of learning they had applied their practical to.

Candidates did well in terms of attempting to provide a full 2 mark aim for their learning practical investigation. A minority of candidates provided aims for biological or social practicals, whereas others provided answers written more in terms of conclusions than aims. Most able candidates operationalised their answers in terms of their aim, for example, in terms of helping behaviour by saying "thank you" and/or gender of males and females.

6 As part of your AS Psychology specification you were required to carry out a practical investigation when studying learning theories.

(a) Describe the aim of the practical investigation you carried out when studying learning theories.

The aim was to observe prosocial behaviour ^{from} ~~between~~ males ⁽²⁾ and females in a bus, for example, saying thank you to the bus driver.



ResultsPlus Examiner Comments

This response gained 2 marks.
The candidate provides a clear aim in terms of the observed behaviour or prosocial behaviour by saying thank you to the bus driver, in addition to both males and females being identified.

6 As part of your AS Psychology specification you were required to carry out a practical investigation when studying learning theories.

(a) Describe the aim of the practical investigation you carried out when studying learning theories.

(2)

To investigate the ~~level~~ self rated level of stress against self rated level of aggression



ResultsPlus

Examiner Comments

This response gained 0 marks. The candidate's response is not an area within the learning theories, so cannot be credited.



ResultsPlus

Examiner Tip

In questions that require additional marks, candidates need to ensure that their answers are accurate so both marks can be gained. Candidates would also benefit from learning the differences between their practicals.

Question 6 (b)

Some candidates did well on this question providing knowledge of their quantitative data analysis for their learning practical. Most able candidates provided results of means, modes, statistical analysis or percentage differences in their observations. A few candidates provided written discussions on their results but provided no numerical reference to support their statements. A minority of candidates defined different quantitative methods which is not what the question asked for. Some candidates provided conclusions or analysis of qualitative data, confusing the requirements of the question.

- (b) As part of your practical investigation you were required to analyse the findings to produce results, including a chi squared test.

Describe the results of your quantitative data analysis for the practical investigation you carried out when studying learning theories.

(3)

We found that women were more nicer than the male. They didn't say much and there facial expressions were blunt. The women said stuff like Thank you, That looks very nice whereas the men said Thanks but not with a smile or grin.



ResultsPlus

Examiner Comments

This response scored 0 marks. The candidate does not provide any quantitative data analysis from their learning practical so cannot gain any marks.



ResultsPlus

Examiner Tip

Candidates need to provide quantitative analysis within their answers to a question like this in order to access the allocated marks.

(b) As part of your practical investigation you were required to analyse the findings to produce results, including a chi squared test.

Describe the results of your quantitative data analysis for the practical investigation you carried out when studying learning theories.

(3)

We found out that women were more likely to smile and laugh whereas men didn't as much. 21 females were laughing when approaching animals however only 6 men were laughing. Women tended to have a close proximity as 16 females got close up to the animals however only 7 males were close up to animals. Lastly, 13 ^{female} ~~women~~ displayed a scared reaction however only 1 male was scared.



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Examiner Comments

This response gained 3 marks.

The candidate provides three separate quantitative data analysis points about their learning practical. They make a comparison between males and females laughing, a second quantitative point on both males and females in terms of proximity and a final mark is awarded for the scared reaction in terms of male and female scored responses.

Question 6 (c)

Many candidates attempted this question with some success in terms of providing two strengths of their learning practical. Some candidates correctly identified strengths of their learning practical but failed to make explicit links to the practical itself, therefore providing generic evaluation points. A minority of candidates provided weaknesses or gave strengths for practicals that were not from learning theories.

Candidates who did provide clear reference to their learning practical did not always go on to justify their strengths in full for additional marks. The most successful candidates referred clearly to natural settings, covert observations, standardised procedures and ethical strengths. These were then developed in terms of ecological validity, reliability, replication and demand characteristics, amongst other acceptable points.

naturalistic covert

(c) Explain **two** strengths of the practical investigation you carried out when studying learning theories. (4)

A strength of my practical investigation was that since it was observation it was covert. This is a strength because this reduces the chance of participant bias occurring or demand characteristics as it would more likely occur if they participants were aware that they were being watched.

Another strength of my observation was high ecological validity. This is a strength because my observation was naturalistic so that the setting would not affect my results therefore reducing extraneous variables.



ResultsPlus Examiner Comments

This response scored 0 marks. The candidate has identified two strengths that could be applicable to the learning practical. In both, they state the knowledge and go on to justify this in terms of demand characteristics and ecological validity. However, there is no reference to the learning practical in either strength.



ResultsPlus Examiner Tip

In terms of practical questions, candidates must ensure that they always add in reference to the practical within their answer - therefore avoiding generic responses.

(c) Explain **two** strengths of the practical investigation you carried out when studying learning theories.

(4)

A strength of the practical investigation was that the setting was natural as it took place on a bus which is a natural environment.

Another strength is that it was a covert observation as no one on the bus knew that I was observing, so there was no effect or pressure on the observees to act in a certain way.



ResultsPlus
Examiner Comments

This response gained 2 marks. The candidate is awarded 1 mark for each strength. In the first strength they identify their observation as being on a bus which is a natural setting; they do not justify this for a second mark so no additional credit is given. The second strength is also awarded 1 mark for identification of the bus being covert, but again there is no justification of this for additional marks.

(c) Explain **two** strengths of the practical investigation you carried out when studying learning theories.

(4)

One strength was I used a field experiment I went on the bus and observed the men and women to see if was more polite and said ~~please~~ ^{thank you} to the bus driver. This meant my practical investigation had high ecological validity. This is because catching the bus was part of there every day routen.



ResultsPlus
Examiner Comments

This response gained 2 marks.

The candidate identifies one strength from their learning practical in terms of going on a bus and observing men and women's polite behaviour. They go on to justify this strength in terms of ecological validity, as catching the bus was part of what they did every day. There is only one strength so a maximum of 2 marks is awarded.

Question 7 (a)

The majority of candidates attempted this question with some success. Most candidates were able to make reference to the Hugo scenario showing a clear understanding of A02 questioning. Lots of candidates referred to Hugo observing his father's speeding in terms of him being a role model. More successful candidates were able to develop this further in terms of Hugo reproducing the speeding as he has recently passed his driving test. There was usually some additional success in terms of the speeding being exciting and Hugo being internally motivated. Finally, candidates quite often then referred to external motivation as he was praised by his friends or he got to where he needed to in a quicker time. A minority of candidates failed to include Hugo or the scenario in their answer, most often providing answers with reference to social learning theory itself. Occasionally candidates included in their answers supporting evidence from Bandura's studies or other strengths/weaknesses, showing confusion of the question requirements. A few candidates focused solely on one element of social learning theory within their answers, for example - role models, which did limit what they could be awarded. It did seem that, for some, there was a lack of knowledge of key elements of social learning theory beyond role models and observation.

- 7 Hugo passed his driving test one year ago. Recently, he received three penalty points for driving in excess of the speed limit. His father already has nine penalty points on his driving licence for speeding.

A, R, R, M.

- (a) Using your knowledge of social learning theory, explain why Hugo may have driven in excess of the speed limit.

(4)

Hugo's father is very important to him as he is close, has authority and warmth to Hugo. This ~~can~~ ^{will} make him a role model to Hugo - many children see their parents ~~as~~ role models due to these features. Due to him being a role model, Hugo will observe and pay attention to his actions (speeding) and retain this information. He will then reproduce it (hence why Hugo has been speeding). Hugo may be more motivated to model his Dad's behaviour if he had vicarious reinforcement (if he saw his father being rewarded for his behaviour). If Hugo gets intrinsic motivation (an inside feeling of

pleasure) or extrinsic motivation (somebody rewarding him for his behaviour) he will be motivated to speed again.



ResultsPlus Examiner Comments

The response gained 4 marks.

The candidate begins with a clear reference to Hugo's dad being a role model which is then further explained in terms of paying attention to him as he is important so his speeding must also be important, retaining this information. Hugo is then motivated to model his father's behaviour if rewarded which is then developed further in terms of intrinsic/extrinsic motivation for him to speed again. This candidate uses the Hugo scenario well in terms of accessing all marks available for this question.

7 Hugo passed his driving test one year ago. Recently, he received three penalty points for driving in excess of the speed limit. His father already has nine penalty points on his driving licence for speeding.

(a) Using your knowledge of social learning theory, explain why Hugo may have driven in excess of the speed limit.

(4)

If Hugo had seen his dad speeding he may have thought that it would be ok for him to speed. Hugo could have been looking to his dad as a role model so he would follow in his foot steps if his dad is a dangerous driver, Hugo will recreate their actions because his dad has done them and he's his role model.



ResultsPlus Examiner Comments

This response gained 1 mark. This candidate references the Hugo scenario in terms of his father being a role model. There is no additional clear development of any other knowledge of social learning theory that can be credited further.



ResultsPlus Examiner Tip

Candidates must ensure that in terms of longer A02 focused questions like this one they provide enough depth from their theory knowledge to gain access to all marks, in addition to embedding the scenario within their answer.

Question 7 (b)

The majority of candidates were able to provide a partial answer for this question but did not always justify their response for full marks. Lots of candidates provided weaknesses which were not specific to social learning theory or gave answers that were not detailed enough for identification. This resulted in generic weaknesses which were not specific enough for social learning theory. Lots of answers that were successful used alternative theories of operant conditioning suggesting that learning was through positive reinforcement examples or biological in terms of evolutionary/genetic example alternatives.

(b) Explain **one** weakness of social learning theory.

(2)

Social ~~learning~~ theory suggests we learn from role models, however it does not explain why some individuals do not ~~do so due to punishment and positive and negative reinforcement~~. Some individuals may rebel and not follow their role models. For example aggression can be the result of predispositions and ~~of a~~ brain dysfunction, not ~~the~~ imitation of a role model.

(Total for Question 7 = 6 marks)



ResultsPlus Examiner Comments

This response gained 2 marks. The candidate clearly identified and justified a relevant weakness of social learning theory in terms of biological alternatives of brain dysfunction and not imitation of a role model.



ResultsPlus Examiner Tip

Candidates would benefit from clearly identifying a weakness of the theory they are being asked about and ensuring their justification is relevant and accurate in terms of the theory they are evaluating.

Question 8

Many candidates provided good answers of classical conditioning showing some knowledge and understanding of it as a theory to explain human behaviour. More able candidates referenced knowledge of learning by association and natural reflex paired with neutral stimulus, in addition to other knowledge areas of classical conditioning. There were some omissions in candidates' answers in terms of the classical conditioning procedure in addition to inaccuracies in terms of application to examples.

For many candidates there was good use of Pavlov dog studies, Watson and Rayner's Little Albert study, alternative theories of operant conditioning and issues relating to reductionism. The best answers successfully incorporated A01 and A03 points throughout their answer, in addition to providing a balance of strengths and weaknesses in terms of aspects of classical conditioning. Some candidates' answers were influenced by a lack of reference to A01 knowledge of classical conditioning theory, evaluating the theory but without reference to the knowledge of the theory.

Application points attempted to refer to Capafons and phobias but at times this was limited in accuracy. Often key terminology was used within answers showing that knowledge of classical conditioning theory was known to candidates but often not effectively applied within their answers. Balance in some candidates' answers again limited their level in addition to absent conclusive elements.

As a level based question it is important to note that an A01/A03 response was required which needed to show an equal emphasis between knowledge and understanding versus evaluation and conclusion.

Therefore those candidates who scored highly on both skills were able to demonstrate accurate and thorough knowledge and understanding of classical conditioning theory as an explanation of human behaviour. This A01 knowledge was usually embedded with a logical evaluation throughout their answer, not just in the second half. This, therefore, allowed candidates to demonstrate logical chains of reasoning throughout, displaying an awareness of competing arguments with a balanced conclusion. The most able candidates demonstrated knowledge and evaluated through each statement or paragraph within their answer, allowing them to access quickly and efficiently the logical chains of reasoning throughout their answers which then usually resulted in a balanced conclusion.

Rigs-dropped tokens • Tarata (fruit flies)
 • Olsson et al. • Watson + Rayner
 • Pavlov - brain here to assume

8 Evaluate classical conditioning as a theory to explain human behaviour.

(8)

classical conditioning believes that we can learn behaviours by pairing a ~~constant~~ neutral stimulus with an ^{unconditioned} ~~unconditioned~~ stimulus ^(UCS) in order to create a ^{conditioned} ~~conditioned~~ response ^(CR) to the neutral stimulus ^(NS). Pavlov's study on salivation in dogs supports this as Pavlov successfully

paired the sound of a metronome (neutral stimulus) with food (~~an~~ UCS) in order for the dog to salivate when it heard the metronome (~~an~~ CR). However, a weakness of this study was that they were unable to study the brain at the same time and so had to assume that what happened was what they expected.

Classical conditioning also suggests that a fear can become generalised to other objects that are similar to the ~~paired~~ conditioned stimulus. ~~Watson~~ Watson and Rayner's study on 'little Albert' supported this as ~~the~~ Albert's fear of white rats became generalised to other things such as Father Christmas and other white things such as rabbits. However, an issue with this study is that it only used one rat, and therefore the results may not be applicable to the rest of the target population.

It is suggested in classical conditioning that by pairing a UCS with an NS, we can create a CR to the NS. A theory that supports this is Tanaka et al, who paired the smell of ~~the~~ peppermint with sucrose which led to the proboscis of the flies extending when they smell peppermint. However, ~~as~~ as this study used only animals, we cannot assume that the results would be applicable to humans, weakening how much the study supports classical conditioning.

As classical conditioning is a scientific theory, it is easy for experimenters to ~~the~~ set up artificial

situations where classical conditioning can be seen. This increases the validity of the theory as quantifiable data can be recorded which is objective. However, not all studies have found that pairing a UCS with an NS gives a CS. For example, a study with pigs found that the pigs did not associate dropping tokens in a box with food, but that simply dropping the tokens gave them food. This suggests that classical conditioning cannot be applied to every situation.

Alongside this, classical conditioning also ignores individual differences in humans, for example, how likely they are to associate things with each other.

In conclusion, on one hand, classical conditioning is good because it has many supporting studies such as Pavlov, and Watson and Rayner. On the other hand, classical conditioning cannot effectively explain human behaviour because there are opposing studies alongside many weaknesses of the supporting studies.



ResultsPlus Examiner Comments

This response gained Level 3 - 6 marks. The candidate begins with knowledge of classical conditioning procedure which they apply successfully to Pavlov's study for a strength. The candidate then uses Watson and Rayner as another strength with an additional evaluation point, a weakness at the end of the second paragraph. Additional evaluation points are made throughout the candidate's answer; however they are not always accurate. The candidate offers a conclusion at the end of their answer. They demonstrate accurate knowledge and understanding of classical conditioning theory in addition to providing mostly coherent chains of reasoning leading to a conclusion being presented.



ResultsPlus Examiner Tip

Candidates must ensure that they learn fully key knowledge areas within all theories on the specification in order for them to provide enough detail in the longer response questions.

Question 9

The majority of candidates were able to attempt this question with some success. In terms of each study Raine was well attempted with knowledge reference to PET scans, sample, results and conclusions; however, there were key omissions for some of these elements within candidates' answers. For some candidates coverage of Bandura's studies was good, with the strongest candidates being able to differentiate in terms of knowledge between the three studies although this was not common. Quite often candidates blended the three studies together which did cause some confusion in answers when it came to general conclusions of all three - leading to inaccuracies.

Many candidates were able to make real life applications in terms of applied examples of Raine to crime prevention and Bandura to stricter censorship laws. In addition, candidates used knowledge areas within the studies for use in their applications, for example - Raine et al's use of PET scan in an artificial setting therefore lacking ecological validity. Candidates' answers were restricted in terms of reaching the higher levels for different reasons, an imbalance between Raine et al and the Bandura studies or answers having strong A01 knowledge but limited A03 (or vice versa). There was a lack of a well-developed argument for many. In terms of A03, some candidates did proceed with providing evaluative statements but these were quite often underdeveloped, for example 'lacked ecological validity' but did not go on to say why. A minority of candidates did not understand what was meant by real life applications, for these answers both studies quite often had knowledge but showed limited development in terms of A03, meaning progression to higher level bands was not possible.

Occasionally candidates did not finish their answers to this question which may indicate timing issues for some. This was even more apparent in answers that provided an excellent overview of Raine or Bandura but could not provide the same quality for the other study before they were finished.

As a level based question it is important to note that an A01/A03 response was required which needed to show an equal emphasis between knowledge and understanding versus judgement and conclusion. Those candidates who scored highly on both skills were able to demonstrate accurate and thorough knowledge and understanding of the extent to which Raine et al (1997) and Bandura (1961, 1963, 1965) studies had real life applications. This A01 knowledge was displayed with logical chains of reasoning throughout their answers, not just in the second-half of the essay. This, therefore, allowed these candidates to demonstrate an awareness of competing arguments throughout their answer, enabling them to provide a balanced response. The most able candidates provided answers which did not just provide knowledge then evaluate what was being asked in the question but demonstrated knowledge and evaluated through each statement or paragraph the candidate was writing about - this allowed candidates to access quickly and efficiently the balanced judgement/decision elements of the level banding.

SECTION C

murderer

- 9 As part of your AS Psychology specification you were required to learn about the classic study Raine et al. (1997) and research carried out by Bandura (1961, 1963, 1965). 72 76

66
To what extent do Raine et al. (1997) and Bandura (1961, 1963, 1965) have real-life applications?

(12)

Raine et al (1997) had real-life applications as he used real prisoners who had been convicted for murder in his study, to see if murderers had more ~~egg~~ or less active parts of the brain when shown images. ~~has~~ This has real life application as Raine et al found that murderers did have more glucose in their right amygdala than non-murders, therefore their brains work differently. His findings can be used to understand the differences in brain of murderers and whether it is due to their nature/biological. However you could argue that ~~there were~~ individual differences weren't taken into account - not every murderer will have the same processes. Despite this, researchers recorded the prisoners' disabilities such as 6 having schizophrenia, and

Bandura (1961) can have real life applications as they concluded that boys were generally more aggressive than females and the non-aggressive model was not imitated. This can be applied to school and home environments as ~~all~~ teachers and parents can ensure no aggressive behaviour is displayed to avoid imitation. However toys like the Bobo doll weren't very common so you could argue this ~~was~~ didn't have task validity.

Bandura (1963) could be applied as he found that children imitated more aggressive behaviour after watching the cartoon and film rather than real life. This can help parents to ensure children don't watch violent TV ~~programs~~ (keep them watching Universal or parental guidance), to inhibit imitation of aggressive behaviour. However you could argue this lacked task validity as children wouldn't usually sit in a darkened room at nursery.

Bandura (1965) found that males were more aggressive than females which can be applied by especially ensuring boys don't experience any aggression in form of television to avoid imitation and to not give rewards to children who do aggressive things. However this study was also in a natural setting (California State University) so can give results that are reliable and repeatable.

To conclude quite at all, and Bandura's 61, 63 and 65 studies can be applied as they allow us to look at the way the brain works for murderers (after PET scan - Raine) and Bandura's allow us to avoid aggressive imitation forming in children as it shows that aggressive acts are imitated therefore should be avoided.

(Total for Question 9 = 12 marks)

TOTAL FOR SECTION C = 12 MARKS

TOTAL FOR PAPER = 70 MARKS



ResultsPlus
Examiner Comments

This response gained Level 2 - 5 marks. The candidate begins their answer with mostly accurate knowledge and understanding of Raine et al's (1997) study for Level 2 but there is not enough A01 for higher marks. In terms of real life applications the candidate's answer produces some development with a grasp of competing arguments. The candidate moves on to write about Bandura's studies showing mostly accurate knowledge and understanding for Level 2 with some application to real life. The candidate's coverage of Bandura is stronger than Raine so there is imbalance in the candidate's overall answer. The candidate is not awarded 6 marks as neither skill is well covered, the A03 is not always fully explained which restricts the answer to 5 marks.

Paper Summary

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

- make sure that, within their responses, they include accurate knowledge of the study, theory or method being questioned - this will allow them to access this skill mark
- when being asked about A02 - skill application to a specific scenario or practical - it is important that responses are very clearly linked to avoid generic answers
- pay close attention to the level bands in terms of structuring answers so that they maximise the time they have with what they know. A balance/judgement/reasoned chain of argument does not have to fall into the structure of A01 knowledge and A03 evaluation - both skills can be used together throughout their essay.

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>

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