Examiners' Report
Principal Examiner Feedback

Summer 2019

Pearson Edexcel International GCE

PSYCHOLOGY WPS02: Biological psychology, learning theories and development

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Question 1a.

This AO1 question required candidates to focus on describing the procedure of Raine et al. (1997) and most candidates did focus on the procedure, showing they are reading questions carefully. Some answers did include the aim.

As this is a study in detail accuracy is required in terms of the number of participants, when the PET scan was carried out etc. which was not always the case.

Question 1b.

Candidates were required to identify a strength and weakness and then justify or exemplify the strength and weakness. Better answers demonstrated this. Some answers did not justify why the strength or weakness.

The answers need to be accurate in the details about Raine et al. (1997) as this is a study in detail. They also need to include specific details from the study. Some answers were generic and could have been true of several studies, showing no knowledge or understanding of Raine et al. (1997).

Candidates have to go beyond just saying why the study was not generalisable for example. They need to explain their statement.

Question 1c.

This question required candidates to identifying an improvement that could be made to Raine et al. (1997) and then justify or exemplify the improvement. When justifying an improvement, the answer should use more than a term, there needs to be some interpretation. Some answers explained a weakness of the study rather than focussing on explaining why/how it is an improvement.

The improvement needs to be specific, so if the improvement is a more natural task could be used what would be a more natural task. The suggested improvement also needs to be an improvement that could feasibly be carried out.

Question 2a.

ai) This required candidates to calculate Spearman's rho. The most common error was not using the two rank columns for calculating d. Another common error was calculating Σd^2 in the table, and then squaring that answer again on the working out. There were a lot of blanks.

aii) The answer required identification of both the strength and direction of the correlation. Often one of these was missing. Those who did correctly identify the strength and direction of the correlation often failed to gain the second mark as they did not interpret this in terms of their answer to part i).

Question 2b.

This was an AO2 (identification in relation to the scenario) and AO3 (exemplification) in terms of the difference between p=0.05 and p=0.01. Many answers could not identify the difference between them. There were also a lot of answers that did not include any links to the scenario.

Question 2c.

This was an AO2 and AO3 question. The AO2 required candidates to identify a weakness in relation to Hassan's correlation. The most common answer was that it could not determine cause and effect, with the better answers linking this to the two variables in Hassan's study and so gaining this mark. The best answers could explain the weakness and gain both marks. Weaker answers did not focus on Hassan's use of correlation.

Candidates need to link their answers to the scenario if requested by the question, and this needs to include more detail than repeating a name.

Question 3.

Centres are reminded that the practical investigation has to be a correlation, and has to be relevant to topics covered in biological psychology. Therefore, it should be a correlation that looks at aggression or at bodily rhythms. There was a large minority of answers that were not on topics covered in biological psychology.

The most popular correlation was investigating height and aggression.

a) This was an AO2 question asking candidates to describe their results. To be creditworthy details had to be specific to the biological correlation. Often candidates did not write enough to access all of the three marks available, not going beyond the fact that there was/was not a correlation between the (named) variables.

b) Candidates had to identify a strength of their biological practical (AO2) and then justify that strength (AO3). A lot of answers did not relate specifically to the biological practical. Other answers stated that a correlation was used because it shows a relationship, but there was nothing about finding a relationship is a strength. Those answers that did successful identify a strength of their practical often failed to go on to explain that strength.

c) The question asked about ethics of the biological practical and the vast majority of answers did focus on ethics. However, a lot of the answers were not specific to the biological practical and could apply to any practical.

If asked to write about a practical investigation the points written should be explicitly about that one practical rather than generic points that could also apply to other practicals.

Question 4.

This essay required candidate to show knowledge and understanding (AO1) of the structure of the brain and brain functioning in relation to aggression, and then to apply that knowledge to the scenario (AO2).

Better answers demonstrated accurate and thorough knowledge and understanding, going beyond naming the areas of the brain involved. They were also able to apply this knowledge and understanding to details from the scenario, linking it to specific behaviours described in the scenario.

Weaker answers often lacked detail especially for the AO2 and just stated that this could explain Grei's aggression with no more detail from the scenario.

<u>Section B.</u>

Question 5a.

This question was specifically about the results of Skinner's superstition in pigeons' study (1948). Unfortunately, it was clear that very few candidates had detailed knowledge of this specific study. A lot of answers were about the pigeons being given electric shock or pecking buttons.

Those that did know the study were able to gain credit for accurately describing the results. The best answers were able to give specifics about the exact movements the pigeons demonstrated.

The most common way for answering this question was to give two results and one conclusion.

It is a named study on the specification so candidates are expected to know specific details about the study.

Question 5b.

Candidates were required to identify a weakness of Skinner's superstitions in pigeons (1948) study (AO1) and then exemplify or justify the weakness (AO3). The most common weakness was issues with generalisability.

Better answers were specific to the named study, and were able to explain the weakness. Some answers were evaluating animal studies in general rather than Skinner's study explicitly.

When using ethics as a weakness some answers stated it was unethical due to the suffering caused without reference to the fact they were starved to 75% of their body weight which is acceptable. Candidates need to bear this in mind.

Question 6a.

Good answers were able to describe what positive reinforcement meant and give the correct example form the scenario. Weaker answers were not specific about what type of reward positive reinforcement was. Some answers include an example of positive and negative reinforcement within their answer.

Question 6b.

This was not answered as well as 6a, with many answers focussing on punishment rather than negative reinforcement.

Good answers were able to accurately describe negative reinforcement and then give the correct example from the scenario.

Question 7a.

This was an AO2 question requiring candidates to describe how a naturalistic observation would be carried out. Most answers were related to the scenario in some way, and engaged with males and females and how often they answered questions. The best answers accessed the top marks by writing enough detail. Weaker answers tended to not write enough detail to gain all the marks, and some included generic points as well as linked points.

Centres should reinforce that students need to look at the number of marks available and then write enough to access all the available marks.

Question 7b.

This question was a combination of AO1 for identifying a weakness and AO3 for exemplifying or justifying the weakness. The answer did not need to be applied to Priya.

Weaker answers tended to be categorical, such as saying they would know they were being observed, when this is not accurate. The better answers were able to identify a weakness and then add an explanation.

Question 7c.

The most popular answer for an improvement to naturalistic observations was to include more than one observer, followed by repeating the observation. The better answers were able to accurately identify and improvement and then explain it. Weaker answers could often identify and improvement but offered no explanation.

Question 8a.

Candidates were required to identify the level of measurement used in the table. Only the better answers were able to do this. A lot of answers did not mention any level of measurement, instead writing likert scale or mean for example.

Question 8b.

Most answers were accurately able to calculate the mode and range.

Question 8e.

Most answers were able to write a conclusion based on the data from the table. However, it was only the best answers that then used the data from the table in their answer.

Question 9.

This question required candidates to show knowledge and understanding of classical conditioning (AO1) and evaluate it. Better answers showed good knowledge and understanding of classical conditioning and were able to describe the process, often including an example to further demonstrate their knowledge and understanding. Weaker answers showed limited knowledge and understanding often not going beyond stating the terms, or getting some of the terms incorrect. The AO3 was varied, with better answers being able to show at least developed evaluation that understood competing arguments. Weaker answers often focussed on either Pavlov's study with dogs or Little Albert only.

Section C.

Question 10.

Candidates were asked to evaluate the contemporary study in detail. The most common answer by far was Bastian et al. The best answers were able to show accurate and thorough knowledge and understanding of the study and offer a well-developed, logical evaluation that was often interweaved with the knowledge and understanding. However, a lot of answers had an imbalance of the AO1 and AO3. Weaker answers showed knowledge and understanding that was mostly accurate, and the AO3 was only developed some of the time.

Question 11.

This question required candidates to demonstrate their knowledge and understanding of social learning theory and hormones on relation to Kelvin's

aggression, and then evaluate this. Better answers were able to show good knowledge and understanding of both explanations and clearly apply aspects of Kelvin's aggression to their knowledge and understanding. They were then able to evaluate both explanations, and look at competing arguments. Weaker answers often focussed on one explanation with limited knowledge and understanding of the other explanation. They also had only occasional support through the application of relevant evidence. The weaker AO3 had little development in their evaluation.