Questions matter

GCSE

Psychology

8182/1 Cognition and Behaviour Paper 1

Report on the exam

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Contents

The below table is interactive. You can press the control button click on the title of the question to go directly to that page.

Summary

Overall performance compared to last year

This year was the third ‘full’ examination of GCSE Psychology since Summer 2019, and overall performance suggested that students were generally well-prepared for the exam, with clear evidence of sound psychological knowledge being seen in many of the answers. As in previous years, it was pleasing to see many impressive scripts, with students able to demonstrate their knowledge of relevant material, indicating effective teaching and learning. Overall performance was similar to that of last year; there were relatively few scripts with unanswered questions and little evidence that students had run out of time.

However, as with last year, for questions requiring application, there were many examples of students not linking their answers to the context of the stem (e.g. Q3, Q4, Q7 and Q11.2); this restricted the marks available to them. Similarly, in questions that required an evaluation of a study or theory, it was common to see several generic points with little or no reference to the study or theory in the question (for example Q5, Q9 and Q14). Nevertheless, as with last year’s paper, it was pleasing to see that the small mark, maths-based questions performed well, encouraging good responses from many candidates. There were a few questions that challenged students and there were examples of responses that were not related to the questions set in each section. These indicated that students do need to ensure that they read the questions – and any stem material - carefully if they are to provide answers that directly address the requirements of the question. Having said that, the paper performed well in allowing stronger students to show their ability through the higher-order skills of application to stems and extended and elaborated evaluation.

Question 2, which focused on some of the main features of the multi store model of memory, regrettably contained some incorrect information within the table. The table described the capacity of the sensory register as very limited. However, it is widely accepted that the sensory register has a large capacity. The student response data was monitored closely throughout the marking period, and it was established that this did not have any impact on students’ ability to answer the question.

Once again, the majority of students wrote their responses to questions clearly and in the appropriate space provided. However, it is important to remind students that these papers are marked on-screen; answers written in the margins, or in blank spaces below other questions, can result in complete answers not being scanned correctly. Students who need to write more than the given space allows should use the additional pages; these will be matched with the response and marked as a complete answer. It is important to remind students to clearly identify the question number to which their response in the additional pages refers, for example, writing ’10.2.’ rather than just ‘10’ or providing no number at all.

Poor handwriting was once again an issue on many scripts; some answers were barely legible, thus posing a challenge for examiners using on-screen marking. Where clear handwriting is known to be a problem, teachers would do well to make special arrangements to ensure that their students are not disadvantaged.

It is also recommended that centres are aware of the specification content contained in Appendix A: mathematical requirements, as this is not exactly the same as the Data Handling content listed as part of the Research Methods topic.

Areas where students performed well

Multiple choice questions: the majority of students gained the marks available in question 1 (over 90%), question 13 (over 55%), and question 18 (over 75%). It was especially pleasing to see that students were, in the main, indicating their choice of response in the appropriate mark box, and correctly amending their choices when necessary.

Maths questions: these questions were answered well, with very few students giving an incorrect response to question 4.1. Students also performed well on question 4.2, with a significant number securing full marks. Where students did not gain the 3 marks available, it would appear that they had missed the detail of the question which instructed them to calculate how many participants did NOT describe details of the wedding. This further highlights the need for students to read questions carefully. However, the mark scheme was written in such a way that students could be awarded credit for 'Correct workings only' and for 'Some correct workings,' which meant that students were able to gain one or two marks even though their answer was incorrect.

Describing a study questions: in question 5, the majority of students chose Bartlett's War of the Ghosts study, and this was often described well. Some students labelled their answer with aim, method, results, and conclusions, and this seemed to help them to write a clear and detailed description.

Application questions: in question 15, it was pleasing to see that many students were able to apply their knowledge of Piaget's stage theory of cognitive development to the scenario, naming the correct stage for each child and giving some accurate detail on the relevant stages.

Designing a study questions: question 16 was generally answered well, particularly so when students focused on the prescribed bullet points. It is important to remind students that marks are **only** awarded for the requirements that are stated in the bullet points; it was noted that students who did particularly well on this question had ticked each bullet point when they had answered it and had provided answers that were clear and accurate.

Graph question: In the main, question 20.5 well addressed, and there was an improvement in the number of students who were able to gain at least three marks for this question.

Areas where students performed less well

Evaluation questions: in question 5, although there were many excellent descriptions of one study that investigated reconstructive memory, the second part which required evaluation was often answered less well. Many evaluation points were vague and generic, with no reference to the study that had been described, thus limiting the marks that could be awarded. The same could be said for question 9 where several responses offered generic strengths and weaknesses of laboratory experiments. In question 14, whilst there was some understanding of the educational application of Dweck's theory, many students only *described* the theory in detail and thus gained no marks.

Synoptic question: question 17 was a non-research methods synoptic question, and proved to be very challenging for many students, Many students were unable to successfully outline early brain development; several answers focused on the dangers of smoking during pregnancy, with others described Piaget's stages of cognitive development. Whilst more able students were able to gain marks from discussing Penfield's method, there were several instances of the discussion not focusing on before birth and the early years of life.

Graph question: although there was an improvement in the overall response to the 'sketch a graph' question this year, once again, the most common reason for the loss of a mark was for a poorly phrased title, with many referring to 'how DinoCatch *affects* mood improvement' instead of referring to the *relationship* between the number of hours spent outdoors playing DinoCatch and Mood Improvement Rating.

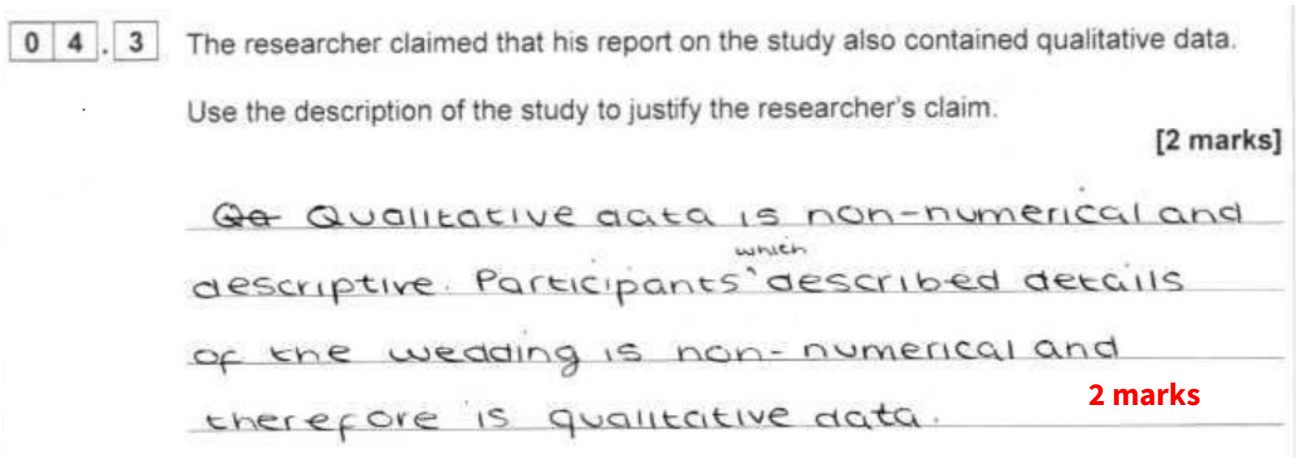
Memory

Questions where students performed well

Questions 4.1 and 4.2: these questions were answered well. Most students knew how to correctly convert a fraction to a decimal. Similarly with question 4.2, the majority of students gained at least one mark (for some correct workings) with many gaining two or three marks.

Question 4.3: this question required students to justify the claim of the researcher that his report contained qualitative data. Most students were able to give a clear and detailed definition of qualitative data, but several did not support the case with evidence from the stem. Script A provides an example of an answer that gained 2 marks.

Script A



0 4 . 3 The researcher claimed that his report on the study also contained qualitative data.

Use the description of the study to justify the researcher's claim.

[2 marks]

~~Qa~~ Qualitative data is non-numerical and descriptive. Participants which described details of the wedding is non-numerical and therefore is qualitative data.

2 marks

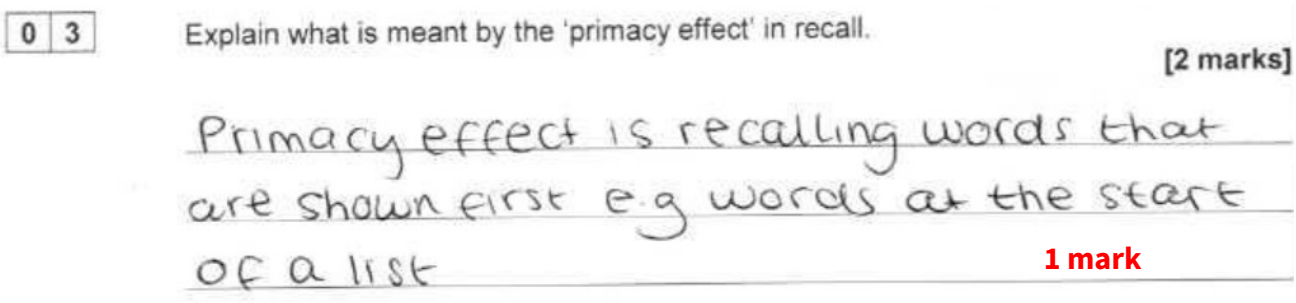
Question 4.4: most students performed well on this question, which tested students' ability to apply their knowledge of different types of memory to a given scenario. There was occasionally some confusion over episodic and semantic memory, but most students correctly identified appropriate examples from the stem.

Question 5: the most successful answers were from students who chose to describe and evaluate Bartlett's study, with many giving a good description that gained the four AO1 marks available. However, some answers lacked detail, despite apparently knowing the study well. In addition, some students confused both versions of Bartlett's study and were not able to gain the full AO1 marks available because of this. It might be better to teach only one version of the study to avoid this confusion.

Questions where students performed less well

Question 3 required students to explain what was meant by the primacy effect in recall. Whilst many students demonstrated knowledge of the primacy effect, several failed to refer to subsequent information / middle of the list and thus only gained one of the two marks available (see script B below).

Script B



0 3 Explain what is meant by the 'primacy effect' in recall.

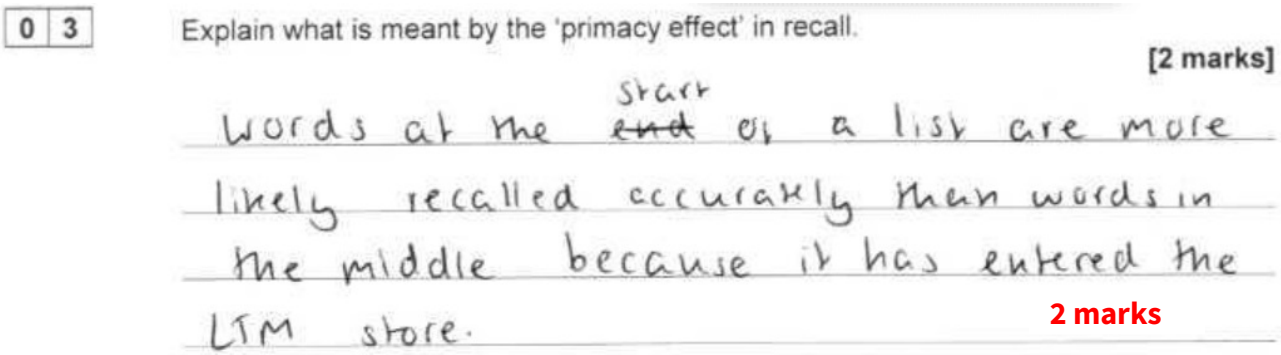
[2 marks]

Primacy effect is recalling words that are shown first e.g words at the start of a list

1 mark

Given that this is a 2-mark question, more detail needs to be given in order to gain both marks. Script C provides an example of a full mark response:

Script C



0 3 Explain what is meant by the 'primacy effect' in recall.

[2 marks]

Words at the ~~end~~ start of a list are more likely recalled accurately than words in the middle because it has entered the LTM store.

2 marks

Students could be encouraged to practice writing 1 mark and 2-mark answers to the same questions, allowing them to learn the increase of detail/elaboration needed for a 2-mark question.

Common misunderstandings

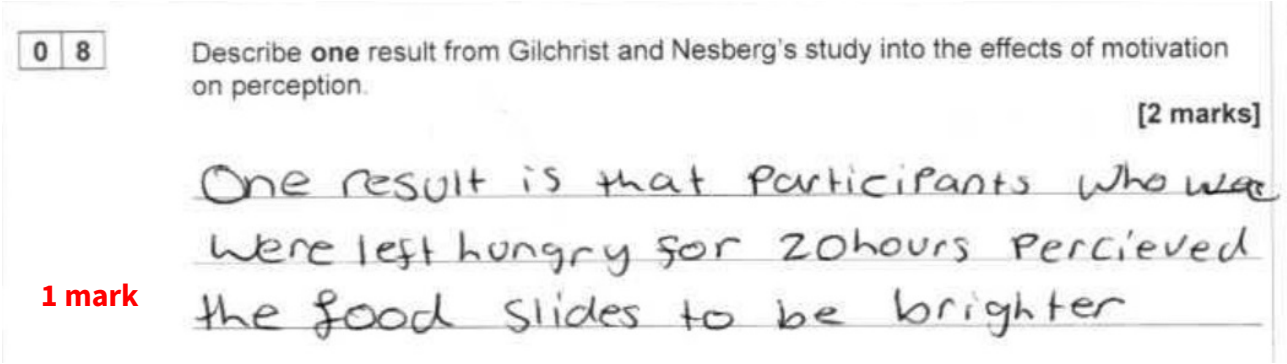
In question 5, many answers contained a few vague evaluation points that were not linked to Bartlett's study, and some students tried to gain marks by presenting all of the general evaluation points they had learned, thereby limiting the AO3 marks that could be awarded. There were also several examples of inaccurate evaluation, for example, that the study was conducted on American students.

Perception

Questions where students performed well

Question 8: this question was generally answered well, with almost 50% of responses gaining the two available marks. Students could gain the marks by either stating that the food-deprived group judged the pictures to be brighter than they were, or by comparing the findings of the experimental group to the control group. However, a significant number of students did not refer to both conditions and were limited to one mark. Script D provides an example of such a response.

Script D



0 8 Describe **one** result from Gilchrist and Nesberg's study into the effects of motivation on perception.

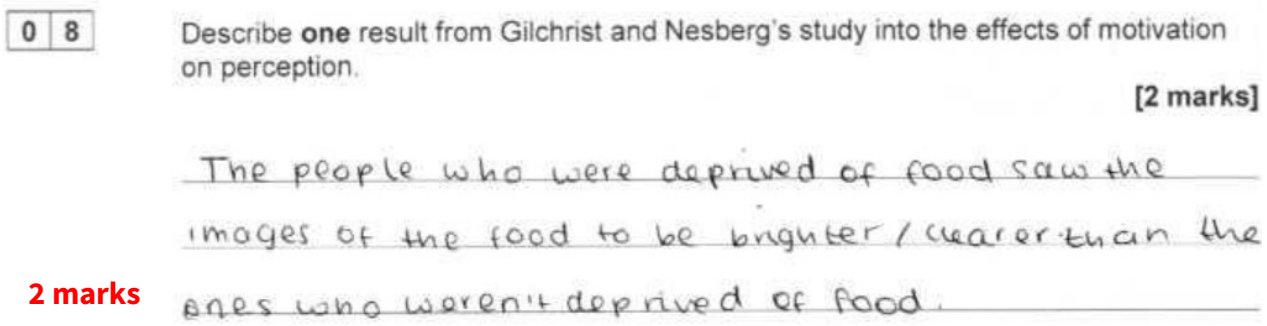
[2 marks]

One result is that participants who were were left hungry for 20hours percieved the food slides to be brighter

1 mark

Script E and F provide examples of responses which gained full credit.

Script E



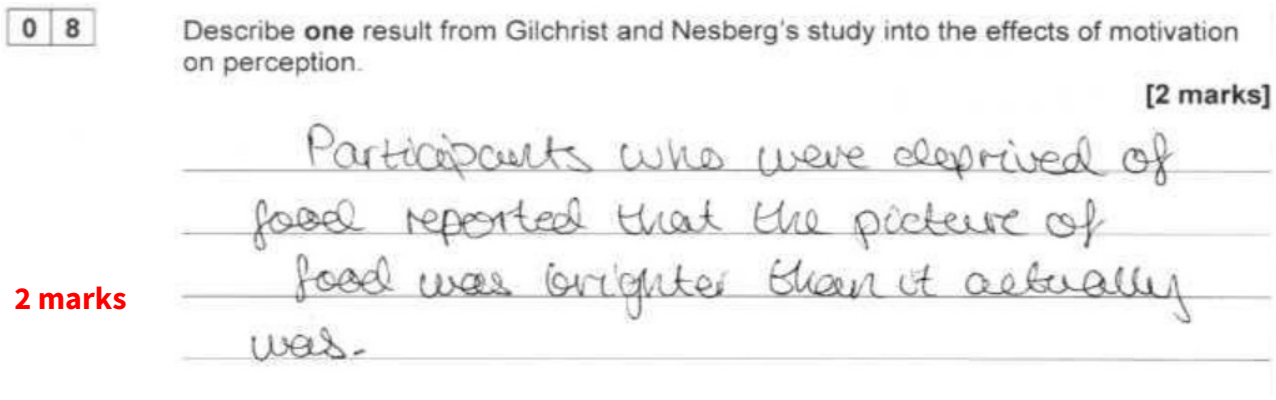
0 8 Describe **one** result from Gilchrist and Nesberg's study into the effects of motivation on perception.

[2 marks]

The people who were deprived of food saw the images of the food to be brighter / clearer than the ones who weren't deprived of food.

2 marks

Script F



0 8 Describe **one** result from Gilchrist and Nesberg's study into the effects of motivation on perception.

[2 marks]

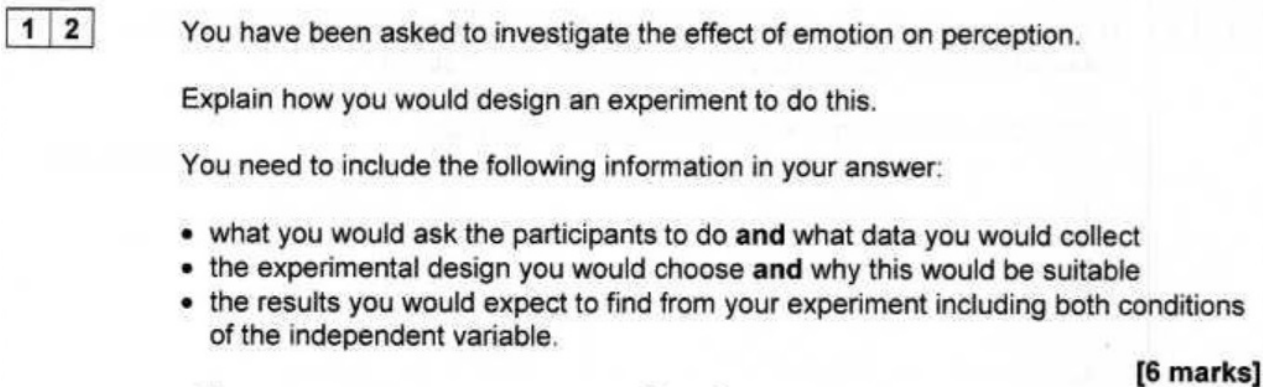
Participants who were deprived of food reported that the picture of food was brighter than it actually was.

2 marks

Question 12: this question provided some interesting responses. Better answers based their experiment on the McGinnies study (neutral and taboo words). In addition, those who directly answered the question, bullet point by bullet point, also gained good marks. However, several students did not include the experimental design or the data they would collect. Many described the task in detail, often in excess of what was required for the two marks available. Students should be advised, in questions such as this, to base their study on a known study, rather than try to devise one of their own. Some of the experiments that were described were somewhat concerning and would not pass an ethics committee.

Script G

This is an example of an excellent answer:



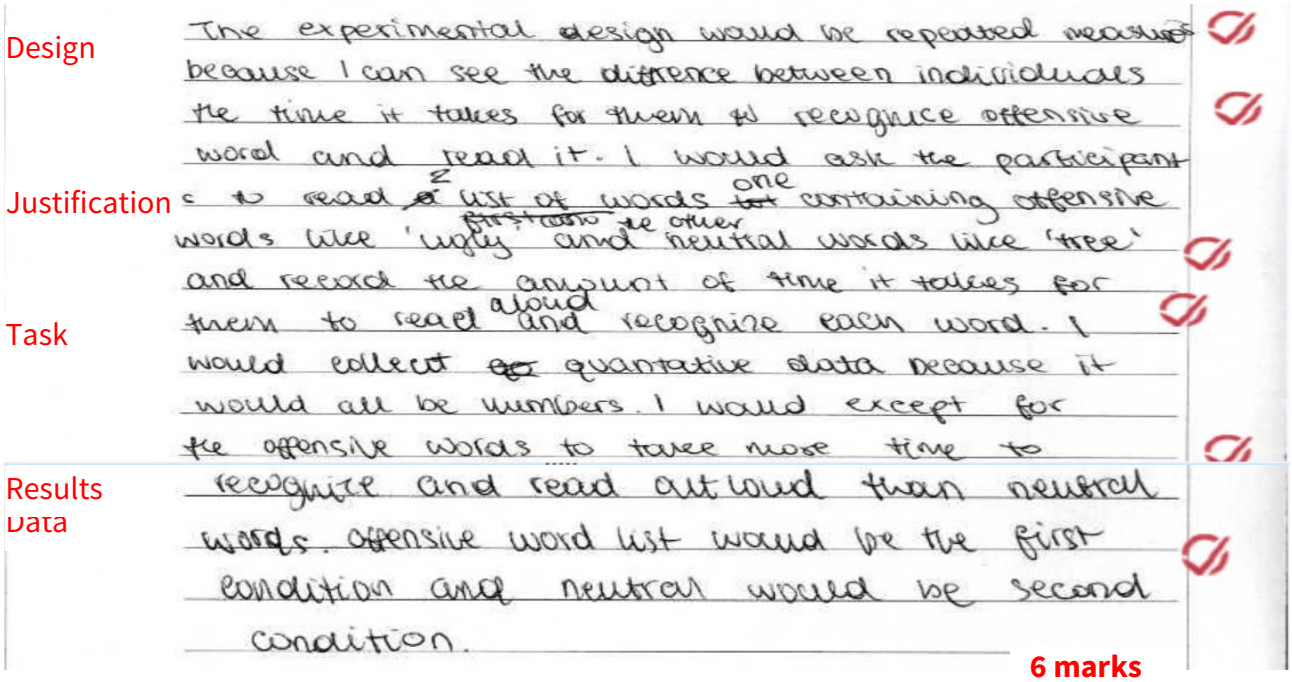
1 2 You have been asked to investigate the effect of emotion on perception.

Explain how you would design an experiment to do this.

You need to include the following information in your answer:

- what you would ask the participants to do **and** what data you would collect
- the experimental design you would choose **and** why this would be suitable
- the results you would expect to find from your experiment including both conditions of the independent variable.

[6 marks]

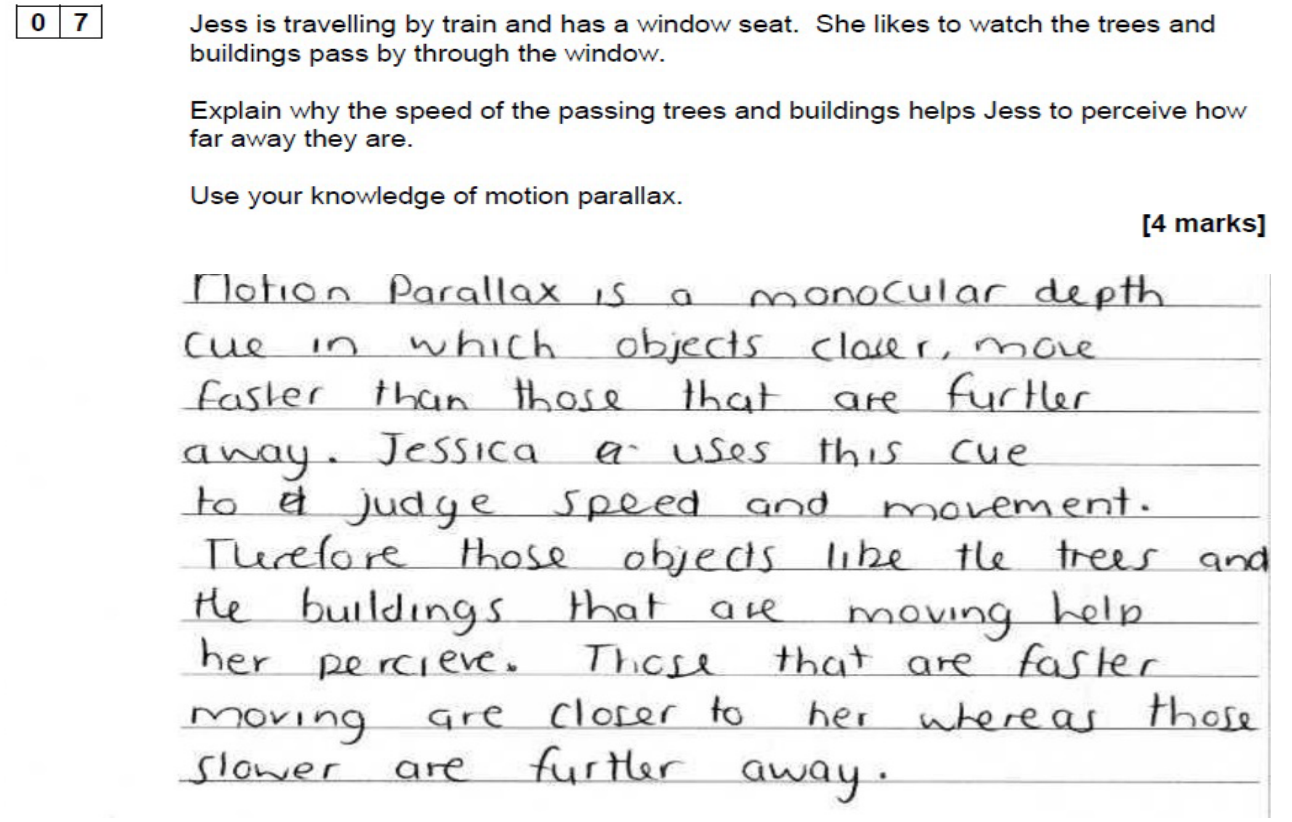


The experimental design would be repeated measures because I can see the difference between individuals the time it takes for them to recognise offensive word and read it. I would ask the participant to read a list of words one containing offensive words like 'ugly' first row and the other neutral words like 'tree' and record the amount of time it takes for them to read aloud and recognise each word. I would collect quantative data because it would all be numbers. I would except for the offensive words to take more time to recognise and read out loud than neutral words. offensive word list would be the first condition and neutral would be second condition.

6 marks

Question 7: this question was often answered well, with many students gaining four marks. However, a significant number of students seemed to believe that objects 'move,' rather than 'seem' (or 'appear') to move, thus limiting the marks available to three (see script H below). Teachers need to be aware of this and ensure that students understand the need to be precise in their use of language.

Script H



0 7

Jess is travelling by train and has a window seat. She likes to watch the trees and buildings pass by through the window.

Explain why the speed of the passing trees and buildings helps Jess to perceive how far away they are.

Use your knowledge of motion parallax.

[4 marks]

Motion Parallax is a monocular depth cue in which objects closer, move faster than those that are further away. Jessica a uses this cue to judge speed and movement. Therefore those objects like the trees and the buildings that are moving help her percieve. Those that are faster moving are closer to her whereas those slower are further away.

3 marks

Questions where students performed less well

Question 6: it was disappointing to find that many students could not identify an appropriate binocular depth cue.

Question 9: whilst many students were able to gain good marks in this question, there were several instances of answers which presented generic strengths and weaknesses of Gilchrist and Nesberg's study, this was particularly so with the strength. It was common to see that 'it proves motivation (or hunger) affects perception' – this is not a strength of the study. The most popular correct answer for a weakness of the study was to identify an ethical issue and relate it to food deprivation.

Script I

0 9 Outline **one** strength and **one** weakness of Gilchrist and Nesberg's study into the effects of motivation on perception.

[4 marks]

Generic strength

Strength: It was a lab experiment so the researcher could take control of extraneous variables so the study could easily be replicated by others.

Weakness: It could be viewed as unethical as deprivation of food could cause physical harm to the body.

3 marks

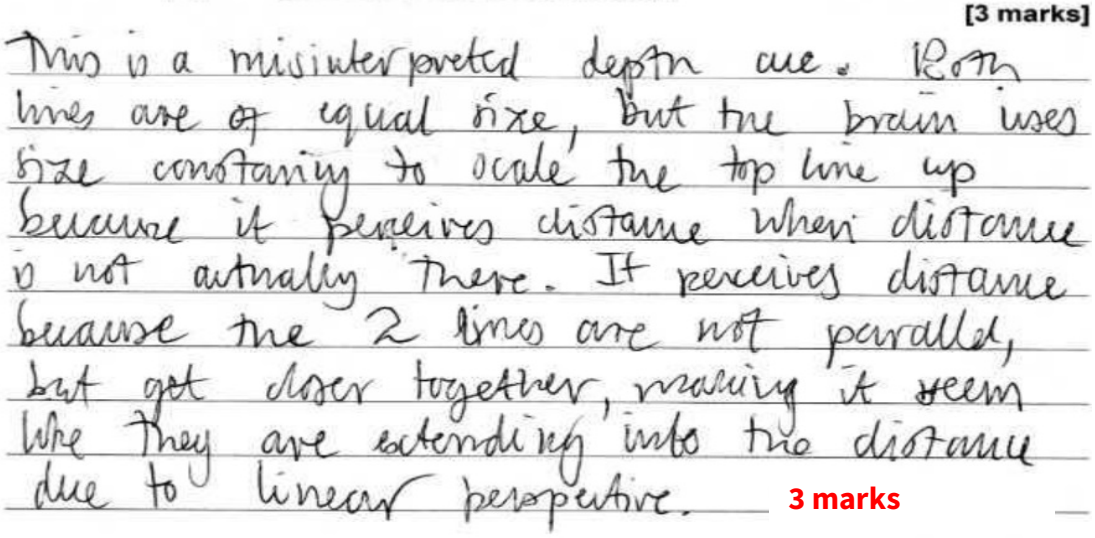
Question 10.1: a surprisingly large number of candidates were clearly not aware of the Ponzo illusion and drew sketches of other illusions. Where there was an attempt to sketch the Ponzo illusion, there were a large number who drew parallel side lines or simply drew a ladder, whilst many others were drawn upside down. Students need to be aware that to gain the marks, the illusion needs to be the correct way up.

Question 10.2: This question required students to outline how psychologists explain the Ponzo illusion. However, many answers *described* the illusion but failed to explain it. For example, many answers referred to 'misinterpreted depth cues,' but did not name the depth cues involved or how they were misinterpreted. See script J below for a full mark response to this question:

Script J

1 0 . 2 Outline how psychologists explain the Ponzo illusion.

[3 marks]



Common misunderstandings

Question 7: many students were confused and stated that objects that were closer appeared to move slower, and objects far away appeared to move more quickly. There were also several references to 'blurriness' (the closer the buildings are, the more blurred they are). Whilst this is true – they *are* blurred because they appear to be moving faster – it was unclear whether the student was referring to texture gradient, in which case 'blurry' would indicate the object was further away, not closer. Students need to be clear and unambiguous in their responses in order to ensure they gain the marks.

Development

Questions where students performed well

Question 15: This question focused on the application of Piaget's stage theory of cognitive development to a scenario. It was pleasing to see that many students were able to apply their knowledge of Piaget's stage theory of cognitive development, naming the correct stage for each child and giving some accurate information on the relevant stages.

Most students were able to name the correct stage for each child, give relevant information about each stage and apply it appropriately. However, there were several answers where there seemed to be little or no understanding (or examples from the stem) of concrete and abstract thinking, thus limiting the number of marks that could be achieved.

Many students described each of the four stages in detail; this simply wastes time, and teachers would be well-advised to guide students to the importance of answering the question that has been set.

Question 16: This question was generally answered well, with many students achieving five or six marks. This was particularly so when students focused on the prescribed bullet points.

Interobserver reliability was occasionally done less well, mainly due to not enough detail being provided for the award of the second mark.

Some students struggled with the behaviour categories and included 'shaking a rattle' despite being told "**Do not** include 'shaking a rattle' as one of your categories." Several categories were not suitable for the age group, and other categories that were potentially suitable had not been operationalised, for example 'the child is happy.'

It is important to remind students that marks are **only** awarded for the requirements that are stated in the bullet points. It was noted that students who did particularly well on this question had ticked each bullet point when they had answered it and had provided answers that were clear and accurate.

Script K is an excellent example of how the student addressed each bullet point, clearly and concisely, and gained the full six marks available:

Script K

1 6 A researcher wants to investigate the most common behaviours displayed by children during the sensorimotor stage of development.

The researcher and an assistant decide to carry out a controlled observation study.

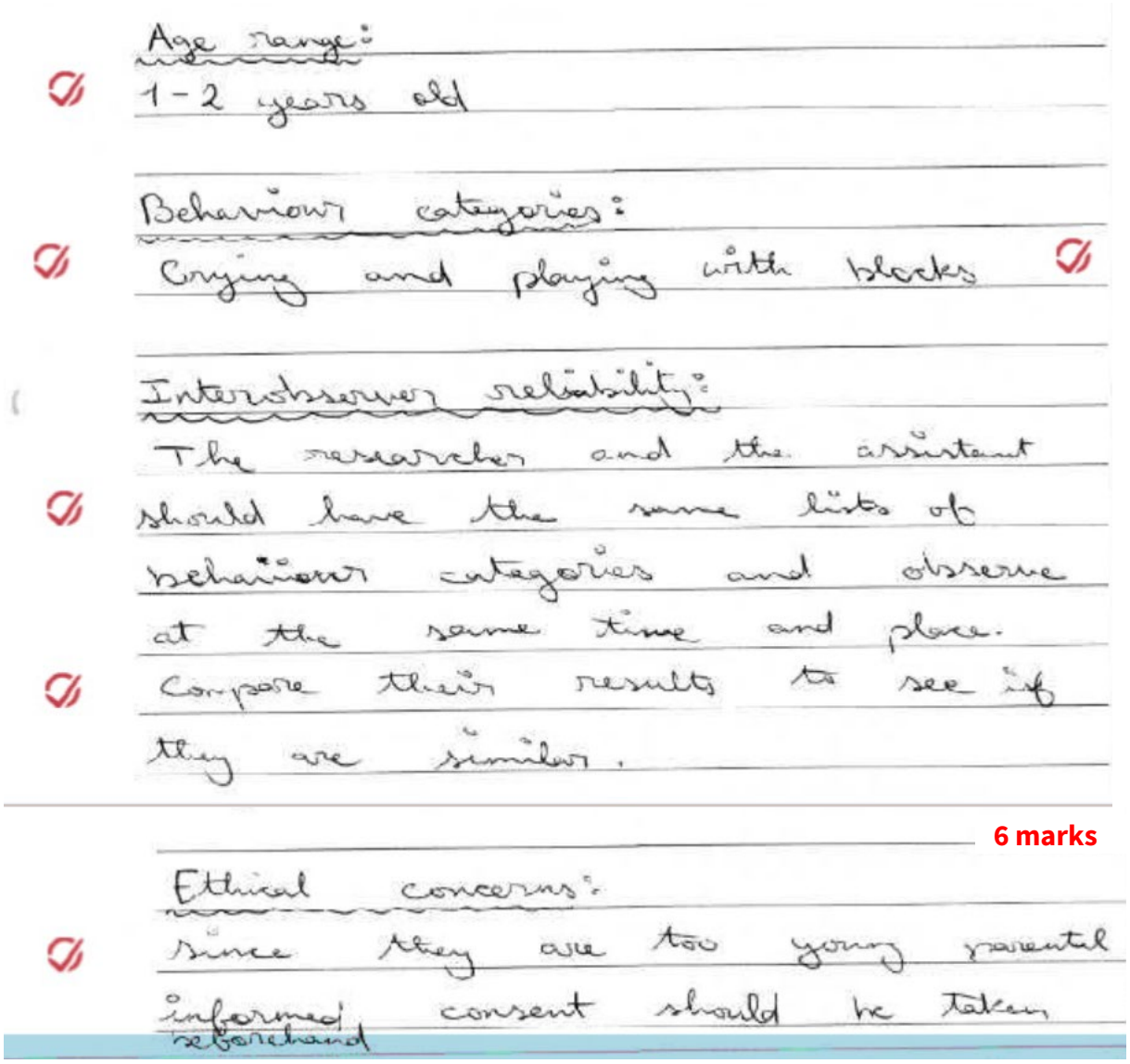
One behaviour being observed is 'shaking a rattle'.

Describe how you would carry out this controlled observation study.

You need to:

- identify a suitable age range of the target population
- suggest **two** suitable behaviour categories that could be used during the observation. **Do not** include 'shaking a rattle' as one of your categories
- briefly describe **two** ways the researcher could make sure there is interobserver reliability
- identify **one** way the researcher could make sure her study is carried out in an ethical manner.

[6 marks]



Questions where students performed less well

Question 17: this was the non-research methods synoptic question and required an outline of early brain development and a discussion of the appropriateness of Penfield's method of investigating the brain before birth and during the early years of life. Whilst the more able students gained good marks from the discussion of Penfield's method, there were very few examples of appropriate material being used to outline early brain development.

Common misunderstandings

Question 14: there were many answers that described the theory rather than addressing the requirement of the question which was to evaluate the theory. It is, of course, not known if this was a misunderstanding of the question, or if students felt the need to write something in the hope that it would gain some marks. Teachers would be well advised to make it clear to students that unless they answer the question that has been set, no marks will be awarded.

Research Methods

Questions where students performed well

Question 19: A significant majority were familiar with the curve, and many students benefited from the 'sketch' command when identifying the location of the mean, as although the placement was imprecise, it was good enough to convey understanding. However, it must be mentioned that there were students who did not know how to sketch a normal distribution curve, and there were many examples of a straight line or a scattergraph. Script L provides an illustration of a 2-mark response.

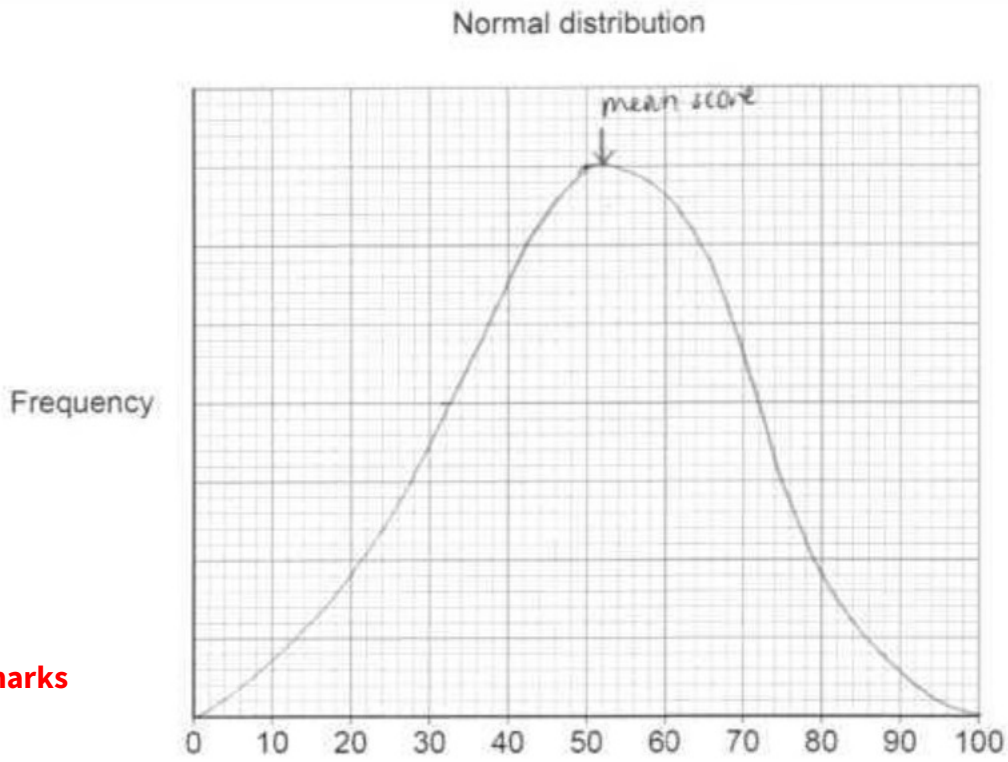
Script L

1	9

Sketch the shape of a normal distribution on the graph paper.

Clearly label where the mean score would be on your sketch.

[2 marks]



2 marks

Question 20.1: this question required students to write a suitable alternative hypothesis for the study outlined in the stem. Although this question produced mixed results, many answers suggested that students had had a great deal of practise at writing operationalised hypotheses. Script M provides an example of hypothesis which achieved full marks.

Script M

2 0 . 1 Write a suitable **alternative** hypothesis for this study.

[2 marks]

There would be more visitors to Waterlake Park between 1-2pm in the 7 days after the release than the 7 days before the release

2 marks

Question 20.2: A good number of students were able to identify a relevant extraneous variable., with the most frequent correct answers being related to the weather.

Question 20.3: it was very pleasing to see that almost all students (over 90%) gave the correct answer to this question.

Question 20.5: in the main, this question was well addressed, with over 70% of students gaining three or four marks. The most common reason for a loss of a mark was due to a poorly phrased title; many students did not realise that the results in Table 3 referred to a correlation, rather than how the app *affects* mood improvement.

Question 20.6: students performed well and there were very few incorrect answers for this question.

Question 20.7 was generally answered well, with many successfully applying their knowledge to the scenario. However, there were some potentially good answers that did not address the scenario and were thus limited to one mark. Students should be reminded that they will not gain full marks for this type of question if they do not *apply* their knowledge and understanding when required. Script N provide an example of a response that gained full credit.

Script N

2 0 . 7 The researcher concluded that playing DinoCatch **caused** participants' mood to improve.

Suggest why the researcher is **not** correct to draw this conclusion.

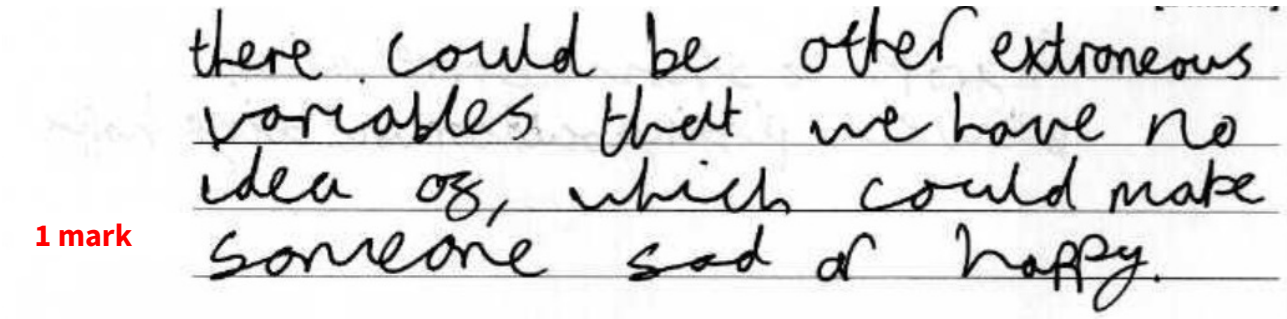
[2 marks]

This is because ~~the~~ a scatter graph does not show causation. It could be that another variable affected the moods of the participants. Or the ~~par~~ mood of player caused more number of people play DinoCatch.

2 marks

Script O

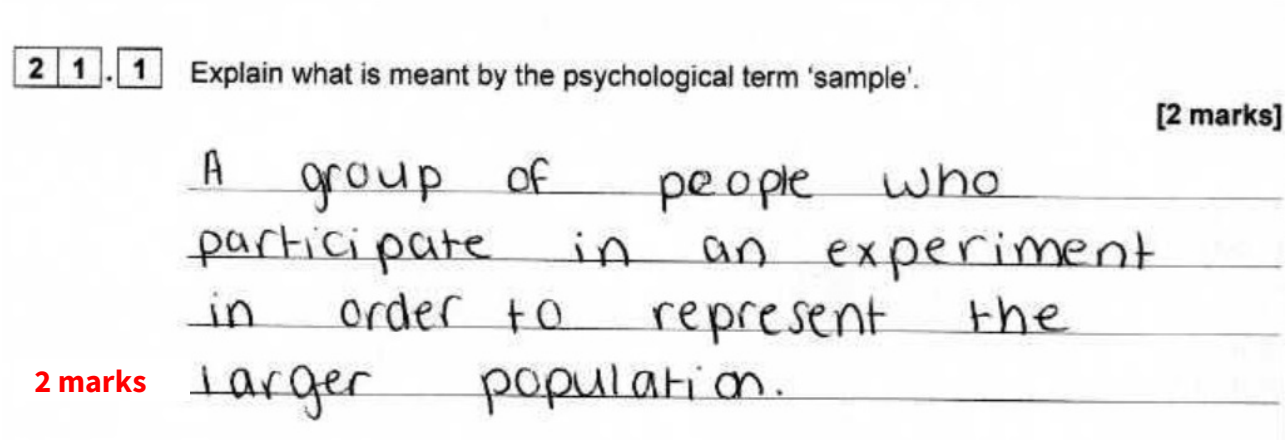
Below is an example of good knowledge and understanding which has not been applied, therefore gaining only 1 mark.


there could be other extroneous variables that we have no idea of, which could make someone sad or happy.

1 mark

Question 21.1 was generally answered very well, with many gaining both marks. Script P is an example of a response which was awarded full credit.

Script P


21.1 Explain what is meant by the psychological term 'sample'.

[2 marks]

A group of people who participate in an experiment in order to represent the larger population.

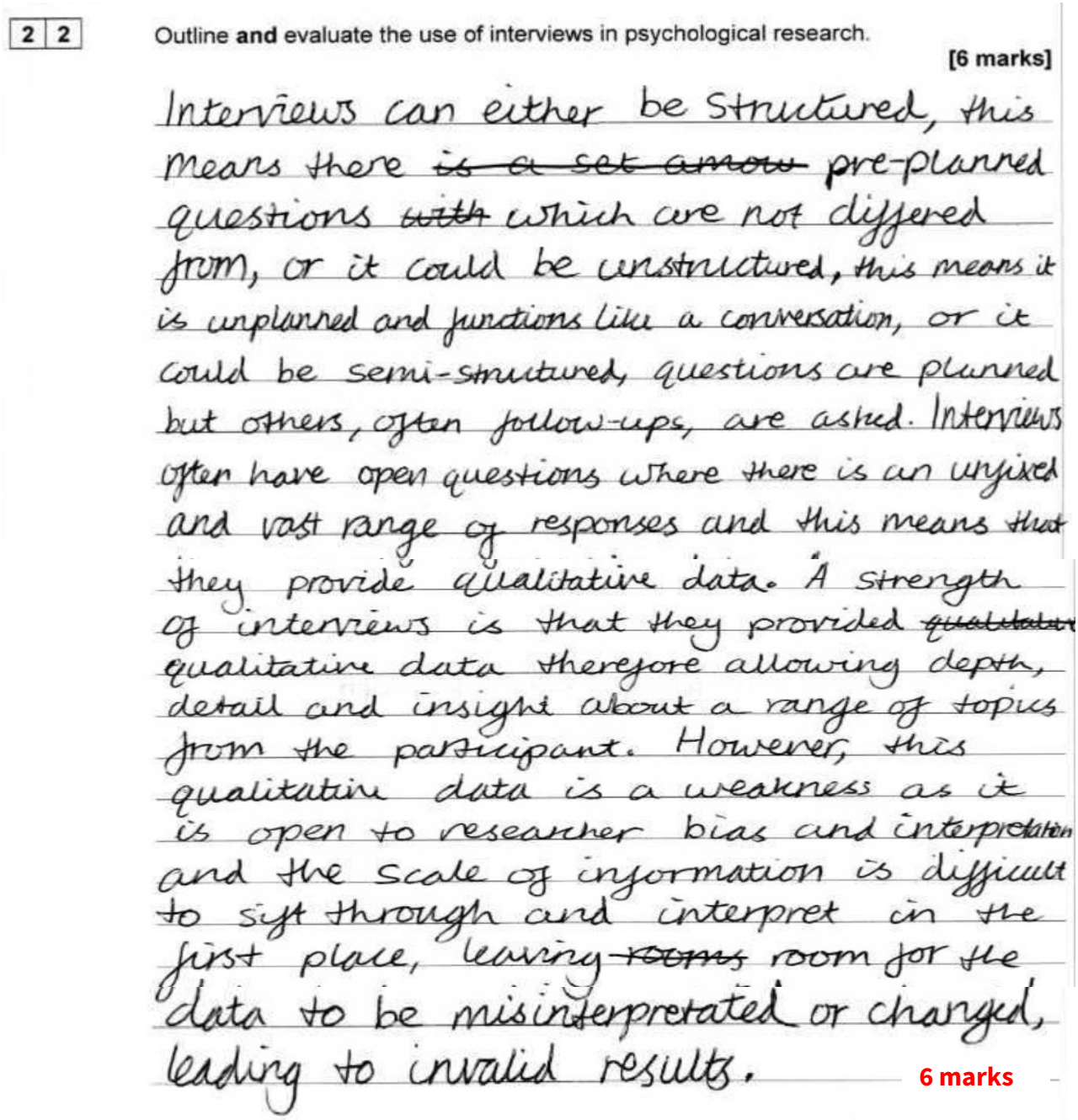
2 marks

Question 21.2: It was pleasing to see that question 21.2 (name a sampling method) was correctly answered by a majority of students (over 80%).

Question 22 – this question was generally answered well, with many very good answers that outlined and evaluated interviews appropriately. However, some students did not include the names of the different types of interviews, and in some cases, those that did include them tended to confuse the details. It was not uncommon to see answers that explained and evaluated job interviews. Unusually, the AO3 evaluation was generally better than the AO1 outline of the use of interviews in psychological research.

Script Q provides an example of a full mark response:

Script Q



2 2 Outline **and** evaluate the use of interviews in psychological research.

[6 marks]

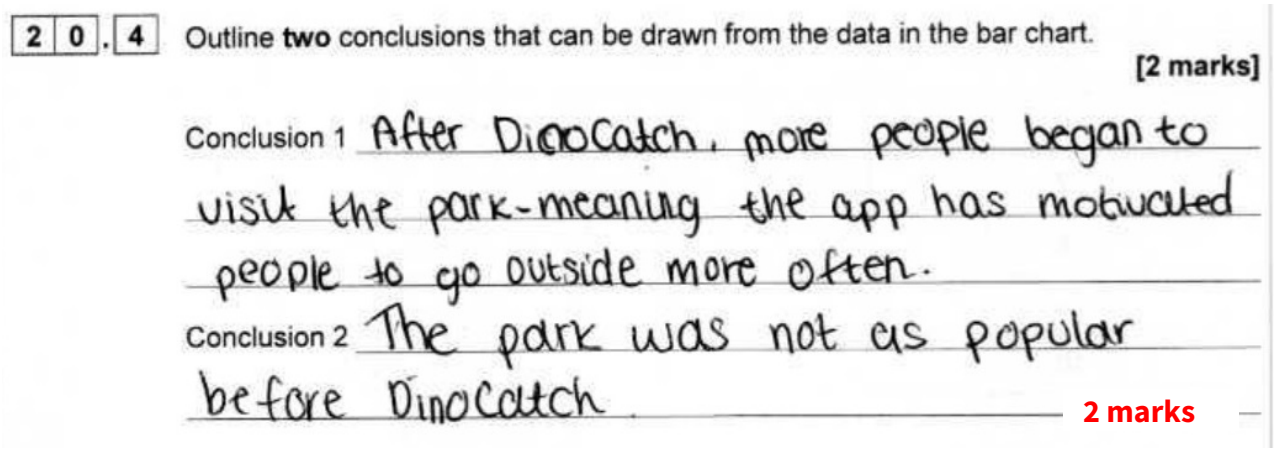
Interviews can either be structured, this means there ~~is a set amount~~ pre-planned questions ~~with~~ which are not differed from, or it could be unstructured, this means it is unplanned and functions like a conversation, or it could be semi-structured, questions are planned but others, often follow-ups, are asked. Interviews often have open questions where there is an unfixed and vast range of responses and this means that they provide qualitative data. A strength of interviews is that they provided ~~qualitative~~ qualitative data therefore allowing depth, detail and insight about a range of topics from the participant. However, this qualitative data is a weakness as it is open to researcher bias and interpretation and the scale of information is difficult to sift through and interpret in the first place, leaving ~~rooms~~ room for the data to be misinterpreted or changed, leading to invalid results.

6 marks

Questions where students performed less well

Question 20.4: Many students found it difficult to differentiate between a finding and a conclusion and, as a result, the question was generally not answered well. The most frequent incorrect answer involved the direct reporting of the data from the bar chart, without extrapolating from this to form a conclusion. However, there were some good answers where students had clearly thought about the requirements of the question (see script R below):

Script R



20.4 Outline **two** conclusions that can be drawn from the data in the bar chart.

[2 marks]

Conclusion 1 After DinoCatch, more people began to visit the park-meaning the app has motivated people to go outside more often.

Conclusion 2 The park was not as popular before DinoCatch.

2 marks

Common misunderstandings

In question 20.1 (write an alternative hypothesis), the term 'alternative' seemed to cause confusion for many students. It could be that students thought that they had to write something that *isn't* a hypothesis, as there were several examples of aims, results, null hypotheses, and suggestions for further research, for example 'an alternative hypothesis could be to test the idea on a beach rather than a park.'

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- identify topics, skills, and types of question where students may need further support
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For more information on ERA, log in through Centre Services.

Professional development

Attend one of our feedback courses where you can review example responses from students and commentaries from our examiners.

Contact us

Our friendly team will be happy to support you between 8am and 5pm, Monday to Friday.

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