General

Overall, students managed their time well with no evidence that they struggled to complete the paper or write full answers. Students generally seem to have gained considerable knowledge which was particularly noticeable in the biopsychology section essay. However, students need to be more selective in the material they include so that they have sufficient time to focus on effective discussion and application. Teachers should continue to support students to develop their evaluative skills and practise writing effective application as it is often these skills as opposed to a lack of knowledge which restricts the marks awarded.

It appears that some students have been revising from revision websites. Whilst these can be a good revision tool, students should be advised to check the accuracy of the material available as some of the incorrect/muddled responses possibly originated from such sources.

Question 1

This was a challenging question with only a minority of students correctly identifying the right answer. All the distractors worked effectively but the most common incorrect response was option C.

Question 2

This question was generally well answered with most students selecting the correct response. The most common incorrect response was distractor C.

Question 3

This question on the whole was answered reasonably well, although most students achieved 1 mark through lack of relevant elaboration. There was some good knowledge of the psychodynamic approach presented, however some students described the tripartite structure of personality rather than focusing on the role of the unconscious. Some students did not follow the instruction to focus on the psychodynamic approach and instead described the unconscious in general terms.

Question 4

This question produced mixed results. There was clear evidence of a good knowledge of mediational processes, yet rather a large proportion of students did not manage to apply the material effectively to explain how the advert might influence viewers’ mediational processes. There were some very effective answers that combined their knowledge of mediational processes with excellent application. Less effective responses only provided limited references to the advert. Students who focused their application effectively on the advert’s influence on viewers’ mediational processes often did very well, while those who wrote more generally about social learning theory, imitation and vicarious reinforcement did less well.

There were many cases where students gave the theoretical knowledge first and then repeated this information in their application. Students should be made aware that knowledge will still be creditworthy when embedded in application/discussion to avoid wasting precious time by repeating information.
Question 5

This question was generally answered well. The majority of students were able to use their knowledge of social learning theory effectively to explicitly describe the identification with, and imitation of, the model.

Question 6

This question differentiated well with marks distributed across the range. The responses to the question suggested that overall many students are unable to give an answer to 2 significant figures. Many students confused significant figures with decimal places and there were numerous rounding errors. It was encouraging to see most students providing their working, as many gained credit for partial working out despite giving an incorrect final answer.

Question 7

This question was very well answered; almost all students were able to provide a modification to increase identification in female viewers. Most students suggested that a female sport player or media celebrity should be used, often with named examples. Some students misunderstood who the identification figure was and suggested replacing the little boy.

Question 8

This question was relatively poorly answered, although there were some very effective responses. Generally, knowledge was much stronger than evaluation. Most students able to name and define introspection with some going on to detail structuralism, but evaluation tended to be limited, focusing on reliability and validity at a generic level. More able students discussed the validity and reliability of introspection and current research that utilises the method. Some students correctly referred to methods of introspection being subjective, but their elaboration focused on demand characteristics and claims of participants lying, suggesting little understanding of the training/procedures involved.

Teachers should remind students that there are only three knowledge marks available on an 8-mark ‘Outline and evaluate’ question and thus they should ensure they have prepared enough evaluation so that their answer reflects this division in marks.

Students who did not have much knowledge of Wundt instead focused on providing a timeline of the emergence of the approaches, or simply described the features of science, without engaging in Wundt’s role. Some students were also quite dismissive of Wundt’s role, demonstrating little grasp of the context and time in which he worked.

Question 09

It was pleasing to see that this challenging question was answered correctly by approximately half of the students. The most common incorrect response was B.

Question 10

This question proved challenging with only half of the students correctly identifying each of the neurons. Students who correctly identified and labelled the neurons in the figure were then able to
respond correctly to the questions regarding function. It appears that students were better at knowing the function of each neuron type rather than the structure of each type of neuron.

**Question 11**

This question produced mixed responses. Most students were able to identify a gland and a hormone but lacked detail in their answer with many muddling the nervous system with the endocrine system. There were some very effective responses who gave the overall function of the endocrine system and then went on to give a specific example of this with a named gland and hormone and good use of terminology. However, too many responses focused on describing the endocrine system rather than providing its general function and some referred inappropriately to the adrenal gland/adrenaline in their answer. Students should be encouraged to take their time to read the question carefully, highlighting key words.

**Question 12**

Overall, students demonstrated a good breadth and depth of knowledge of hemispheric lateralisation and localisation. It seems a shame that so many students relied on a limited range older research when there is a wealth of fascinating up-to-date research on this subject available. The evaluation generally lacked effectiveness due to limited/generic descriptions of methodological issues or due to providing detailed descriptions of studies to support their point.

Unfortunately, many students focused on only providing a detailed outline of Sperry’s split-brain studies with largely generic evaluations. These responses tended to be poorly focused with weak application and the excessively detailed description of the study limited both the breadth of knowledge provided and the opportunities for effective discussion and application.

Students should be reminded that only six of the available 16 marks are for knowledge and thus their responses should reflect this. They should be encouraged to focus on how the methodological issues or studies support/refute their point, rather than giving detailed description.

Some students tended to struggle with appropriate use of terminology, often muddling hemispheric lateralisation with holistic function, and ecological validity for internal or population validity, as well as confusing different areas of the brain.

There were some good discussions of equipotentiality and plasticity, with case studies and research to identify the limitations of oversimplifying the brain to localised functions and the issue of age-related changes.

Many students provided weak application often simply stating the research supported or refuted what Sam/Kieran had said. However, there were some excellent cases where they engaged with application well describing how research into localisation of function and lateralisation supported Kieran’s point. More effective answers also covered the more sophisticated interpretation of Sam’s response in terms of the need to coordinate specialised areas of the brain for complex function and to modify networks due to damage or specialised learning, providing detailed research support. More effective responses were able to draw well from other areas of the specification and make these relevant.
Question 13

This was very well answered, with most students correctly identifying that the reliability refers to the consistency of the data. As expected, the most common wrong answer was response A, muddling reliability with validity.

Question 14

Overall, students were challenged by this question, with very few of the students identifying the correct response. Each of the distractors were effective but the most common wrong answer was response A.

Question 15

Question 15 was generally answered well with a good range of answers demonstrating sound knowledge of the importance of referencing. Some incorrectly referred to checking the validity of this study rather than the sources used, and others lacked clarity over what was being checked.

Question 16

This question was well answered with most students identifying the correct response. The most common incorrect response was A.

Question 17

Question 17 was generally answered well, with most students identifying that a non-directional hypothesis would be most suitable due to a lack of previous research. Most incorrect answers stated that a directional hypothesis was appropriate as they were trying to find a difference/not a correlational study or they were trying to find the effect of the IV on the DV.

Question 18

Most students demonstrated good knowledge of how to write a non-directional hypothesis, but many failed to achieve full marks due to not clearly operationalising the DV and/or IV. Only strong students were able to operationalise the DV, with the improvement in happiness scores being made clear. A small minority gave null hypotheses and were able to achieve full credit. Most of the students receiving no marks provided a directional hypothesis or correlational hypothesis.

Question 19

Whilst a large proportion of students correctly identified the right sampling technique, the limitations provided were very generic and non-contextualised. The most common incorrect sampling techniques provided were random and volunteer sampling. There were a few very strong examples of well contextualised and clear responses, but it was surprising how many students did not seem to understand sampling methods, with many getting confused with random allocation.

Question 20

Students showed some knowledge of matched pairs, with most being able to identify a variable on which the participants should be matched, usually focusing on personality type/fitness/enjoyment of sport or gender. Lots of students wasted time justifying the choice of variable given without
explaining how the researcher could assign the matched participants to the groups. Students who gave ‘gender’ as their variable tended to struggle more to provide detail of how the pairs would be matched, often matching female to male participants.

There was some muddle with the random allocation to conditions, with some omitting to describe random allocation at all and others incorrectly placing all of one type of person in to one condition, eg all extroverts to the team sports condition and all introverts to the independent exercise condition, to make participants happier.

Some answers were very effective and achieved full marks, describing the matching process accurately. However, it was clear that many students did not understand matched pairs design sufficiently well.

**Question 21**

Students were generally able to correctly identify a strength of matched pairs, with the majority focusing on order effects rather than demand characteristics. The wording of the question seemed to help direct students to elaborate their answers, enabling most to gain the second mark. However, a surprisingly large proportion made the mistake of choosing participant characteristics/individual differences, assuming a comparison with an independent groups design rather than a repeated measures design, and therefore did not get credit. Some students also suggested that a matched pairs design would be less time consuming for the researcher than a repeated measures design, which was not creditworthy.

**Question 22**

This question produced a mixed response. Many students appeared well prepared, providing a clear and correct response, often with correct workings shown. On the other hand, many others appeared to have no idea with many responses left blank.

It was good to see students giving their workings as many achieved credit for these despite giving an incorrect answer. A surprising number of students calculated S to be 2, by cancelling out pair 4 from the table or taking 3 away from 5, whilst others added up the total numbers of positive and negatives to give an S of 5.

**Question 23**

A surprising number of students did not attempt this question, whilst others just wrote whether it was significant or not without any justification. A common mistake was to take the wrong critical value from the table, with a lot of students using N=10 incorrectly and therefore giving a critical value of 1.

**Question 24**

This question revealed a very poor understanding of concurrent validity with only a small minority of students being able to achieve any marks on this question. Those who understood the term often went on to gain both marks. Most explanations of what ‘high’ concurrent validity was were limited with many suggesting that there must be a high level of similarity, which was deemed just sufficient to gain the second mark. Unfortunately, there were too many students who clearly had no idea what concurrent validity was. The most common errors were to describe internal validity or to discuss the reliability of the results.
Question 25

This question differentiated students well, with more able students embedding their answers fully into the stem material to produce some very effective answers. Less able students gave generic responses regarding researcher bias/investigator effects. Teachers should remind students of the need to apply their answers effectively when requested.

The most common mistake was to focus on researcher bias when allocating students into their groups, which was not appropriate in the context of a matched pairs study. There was also some lack of clarity between researcher bias and deliberate fraud.

Question 26

Regrettably, there was an error in this question as it contained the word 'internal' when referring to the type of validity. This term is not included in the specification, therefore the question was discounted. All students were awarded full marks for this question.

Question 27

This question discriminated well. Most students were able to identify a range of correct reasons but often got the name of the test incorrect. Those who chose an unrelated t-test were able to gain credit for justifying this by identifying the data as interval data, which was considered acceptable at this level. Some students suggested Chi-Square test as a suitable test but many were unable to justify why the data collected would be at a nominal level.

Question 28

Responses to this question overall showed an excellent understanding of the four elements asked for, yet many students did not justify their design choices. For this type of question students need to think about why certain controls and data analysis is needed.

There were some very effective answers where students gave appropriate suggestions that were well justified. Unfortunately, many responses were not practical or not sufficiently explained, with students frequently failing to give a task and merely providing generic extraneous variables and controls. Data handling and analysis was also generally poorly done, with inappropriate graphs being suggested and measures of dispersion being rarely mentioned.

As in previous series, many students wasted precious time providing details such as hypothesis, ethical considerations, inferential statistics, etc. rather than focusing on the requested information in the bullet points. A number of students presented their answer with an abstract and reference sections and provided results of the study, drawing graphs, etc. which was time consuming and not creditworthy. Students should be aware that only material relating to the bullet points will be creditworthy.

Whilst most students designed an experiment on the effects of group tasks on students’ happiness, some designed alternative experiments and could gain credit for these. Unfortunately, there were some experiments which were designed as a repeated measures study meaning that many of their design decisions were inappropriate.
Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results Statistics page of the AQA Website.