A-LEVEL
PSYCHOLOGY

7182/2 Psychology in Context
Report on the Examination

7182
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General

The overall performance indicated that many students had prepared well for this examination and coped well with the two-year course. Most students attempted all the questions, many giving some very detailed, mature responses, with a good understanding of research methods and biological concepts generally shown. Encouragingly, there were very few issues relating to complete misunderstanding of questions and it appeared that most students were able to finish in the time allocated.

The paper performed well in allowing stronger students to show their ability through their application to stems and their extended and elaborated evaluation. Questions that discriminated the best were 03, 04, 09, 16, 17 and 21. Students should work to improve the higher order skill of application alongside their understanding and use of scientific terminology. For the former, it is important to stress the need to use their knowledge flexibly, selecting appropriately and applying the information effectively in the context of the stem rather than giving generic points, which merely refer to, rather than engage with, the stem. Teachers should encourage students to plan their extended answers carefully with a focus on selecting and shaping material to meet the question requirements.

Numerous answers suffered because students did not pay close attention to the question, particularly the stem for the research methods section and time was often wasted on general pre-prepared but unwarranted descriptions/definitions, for example, defining genotype and phenotype. Poor handwriting was an issue on some scripts that were barely legible, which posed a particular challenge for examiners using on-screen marking. In such cases, teachers would do well to make special arrangements to ensure that their students are not disadvantaged. Students should be reminded of the need to write clearly, using paragraphs for longer answers.

Section A Approaches in Psychology

Question 01

This question was quite poorly answered, with almost two thirds of students failing to achieve level 2, mainly due to weak application. Most students understood the difference between genotype and phenotype, but many did not go on to discuss the interaction with the environment and the diathesis-stress argument convincingly. Students wasted a lot of time providing definitions of genotype and phenotype, mentioning characteristics, such as eye colour, and discussing recessive genes, missing the general focus of the question. Some students failed to apply their knowledge appropriately, simply paraphrasing content from the stem as opposed to engaging with the material and applying their knowledge effectively.

Overall, there was a relatively poor understanding of genotype and phenotype. The most common error regarding genotype involved trying to relate John's genotype to his mother. With regard to phenotype, many students mistakenly suggested that John's phenotype should be tested. Schools and colleges should therefore ensure that students fully understand these terms in a psychological context.

Question 02

Generally done very well with over two-thirds of students achieving level 2 but some lacked the elaboration necessary to gain full marks. There were some good descriptions provided, with quite remarkable detail in some cases and some good answers on levels of consciousness presented. However, there was some confusion over the role of the superego and ego, and many students mistakenly wrote "*the id mediates between the demands of the id and the demands of the superego*". Additionally, some students focussed on the psychosexual stages, which was not awarded credit.

Question 03

There were some very good responses, which were accurate and far more detailed than necessary, with extremely effective and insightful application. However, most of the responses were level 2 or level 3 standard with weaker students struggling to describe abstract ideas coherently using specialist terminology. Students were generally able to provide an accurate description of the humanistic approach with good descriptions of Maslow's hierarchy of needs, although many believed that self-actualisation meant nothing more than doing well in your exams. Better students could explain Rogers' work effectively and some demonstrated very detailed knowledge. Evaluation was mixed, often focussing on the lack of a scientific approach or a discussion of the practical applications of the humanistic approach to counselling theory. There was some confusion relating to reductionism with the common claim that this approach is reductionist because it fails to consider biological mechanisms, which often led to some contradictory evaluations. Some more sophisticated responses used research evidence to support the points posed and elaborated on this effectively. Application was usually attempted, with varying degrees of success. Weaker application either demonstrated a lack of understanding or inappropriate use of terminology, and/or consisted mostly of reiterations of the stem. Evaluation was sometimes better than the outline of the concepts of the humanistic approach. It appeared that many students had prepared to write an essay on the comparison between approaches and thus struggled to give the necessary detail the question required, and struggled to link other approaches back to the question. Thus comparative evaluations often lacked focus. Better students used the stem to construct convincing arguments with appropriate knowledge and evaluation intertwined within their application. The very best were able to blend these elements together in a highly sophisticated manner, effectively referring to other approaches as part of the discussion. Students should be encouraged to take time to plan their answers and construct concise and fluent essays with the appropriate use of paragraphs in order to improve coherence and focus.

Section B Biopsychology

Question 04

This question offered good discrimination. There were some very complex and detailed responses that went beyond the requirements of the specification, although these were not always well focussed. Weaker students mainly struggled with either poor focus on the process of synaptic transmission or a lack of specific detail or inaccuracies, especially regarding the use of scientific terminology. Common misunderstandings included vesicles crossing the synaptic gap, action potentials being excitatory/inhibitory, neurotransmitters being '*fired'* across the gap and confusion between chemical and electrical transmission. Few made use of a diagram and those that did generally were ineffective in explaining the process.

Question 05

Overall, a well answered question indicating sound knowledge of anatomy and function with accuracy and detail, as well as appropriate application. Most students achieved level two. However, many failed to mention the implications of a left hemisphere stroke in terms of right-sided movement. Surprisingly, whilst descriptions of the problems resulting from damage to Broca's area were mainly accurate and detailed, some confused the function of the motor cortex or failed to refer to the motor cortex at all.

Question 06

This question required students to apply their knowledge of plasticity and functional recovery of the brain after trauma to explain why Lotta's grandmother may still be able to make some recovery in spite of her age. Generally there was a good knowledge of the concepts but weaker students struggled to move beyond level 1 due to a lack of appropriate application. Many simply described what plasticity and functional recovery were, with application limited to inclusion of the term *"Lotta's grandmother",* rather than focussing on age. However, there were some excellent answers, where students had thought about the question and selected and shaped material accordingly. Students often went above and beyond what was required, clearly linking their knowledge to the scenario. There were refreshingly good accounts of processes and factors, including well detailed information about plasticity alongside research evidence regarding the effects of age, gender and education.

Question 07

Most students were able to give a disadvantage of quantitative data, but some failed to provide appropriate application. Some common incorrect answers included disadvantages of qualitative data, advantages of quantitative data and advantages/disadvantages of questionnaires.

Question 08

Nearly all students managed to gain at least one mark and many gained full credit. The quantitative question suggested was generally effective, but the qualitative question suggested could have produced a quantitative response, so did not gain credit.   Some students got qualitative and quantitative the wrong way round and consequently gained no marks. The most popular method of answering the quantitative part was either to give a rating scale or to pose a question followed by the words *"Yes/No"*. Although giving a closed answer response that is not officially quantitative, it was credited for this series. However, schools and colleges should ensure students are able to distinguish between quantitative and closed questions for future series.

Question 09

Generally, the outline of ways of studying the brain was accurate and sufficiently detailed, with most students presenting two or even three well described ways of studying the brain. Although most chose to use those named on the specification, other legitimate ways of studying the brain, such as split-brain research, were credited, although the majority of these were poorly focussed.

Overall, evaluation was less successful, with students offering only weak, generic points, for example *"it is very expensive"*, without any comparison or effective elaboration. However, there were some good comparative discussions regarding other scanning techniques, such as PET scans. Surprisingly, evaluative points often focussed on minor issues, such as consent for post-

mortems or lack of movement in fMRI scans, when there are far more important points to consider. Some evaluation was inappropriately focussed on the NHS rather than on scientific research, discussing issues of funding and patient care decisions and/or the benefits of the technique for the patients undergoing them. The lack of specialist terminology was also disappointing. Responses that focused on fMRI studies generally gave a detailed description but often failed to evaluate the core areas of discussion around temporal and spatial issues, and the implications of these in any depth. The majority of answers that focussed on post-mortems were poor, where lengthy accounts were given for why post-mortems may be unethical with weak references to post death consent, alongside some quite humorous and somewhat worrying misunderstandings. Where relevant references were made to the work of Broca and Wernicke, these were not often discussed in enough detail to shape the evaluation convincingly to the question. Overall, students appear to have a superficial understanding of a wide range of techniques and have rote learned a number of advantages and disadvantages of each but lack the deeper understanding to discuss any of these effectively. Schools and colleges should remind students that less is more, as many presented numerous techniques and evaluative points but these lacked elaboration/detail and therefore struggled to move beyond level 2.

Section C Research Methods

Question 10

This question was well answered with over 90% of students correctly identifying the type of experiment used in the study.

Question 11

Almost half of the students gained full credit for this question. Unfortunately, a few gave the independent variable instead of the dependent variable, or got confused with speed or the distance they had to run. Many students failed to state that the running time was measured in seconds.

Question 12

This question was generally poorly answered, with 57% of students failing to achieve any marks and 3% not attempting it. There was an occasional reference to '"*the need for continuous data*", but very few students gained the second mark. Overall, there was a lack of understanding about what a histogram is or when they should be used and schools/colleges need to address this. A common incorrect answer was to assume a histogram is used for a correlation.

Question 13

This question was reasonably well answered. Unfortunately, a number provided a full title instead of naming the type of graph, although when these included reference to a bar chart they received appropriate credit. A number of the axis labels were vague, omitting *"seconds"* or *"mean/average"*, or just writing *"conditions"*. There was also some confusion regarding the type of graph with "*scattergram"* being the most common incorrect response.

Question 14

Although there were some strong responses, generally students found this harder than anticipated. A number failed to receive any credit due to simply defining the mean and the standard deviation. It was also far too common for students not to understand and answer the 'justify' component of the

question. Many students simply restated information from the table or provided possible explanations or conclusions, as opposed to justifications. Although students generally saw the mean as showing a difference, there was often the claim that music hindered performance, with confusion regarding time being a higher score, meaning slower. Worryingly, some students still have little understanding of standard deviation.

Question 15

Despite 36% of students not having the mathematical skills to answer this question appropriately and 3% not even attempting it, those who did have the knowledge answered it well. Some missed or did not understand the requirement for three significant figures.

Question 16

This question was generally answered very well, with the majority of students achieving all five marks. Impressively, nearly all students identified the points in mark scheme for choice of test and most could justify why the result was not significant, although a few picked the wrong critical value from the table.

Question 17

Many students could correctly define a Type II error, although there was some limited descriptions and some confusion between Type I and Type II errors. Few students managed a coherent response to the second part of question, requiring an explanation as to why the 5% level is normally used in research. Many were not clear about the balance between making Type I and Type II errors, suggesting that a 5% level prevented these errors from occurring. Weaker students did little beyond stating that it is used because of convention.

Question 18

From the stem of the question, a clearly uncontrolled variable was the type of music participants listened to in condition B. Surprisingly few students identified this extraneous variable but there were a variety of environmental factors given that received credit, if they could have feasibly changed within one week and affected the running times. Unfortunately, over half of the students appeared not to have read the stem properly and therefore offered inappropriate extraneous variables, thus gaining zero marks. The most common inappropriate variables were participant variables, which would not have feasibly changed within the week, for example running ability, fitness level, age or gender, or issues regarding order effects, which would have been addressed by the design of the study.

Question 19

This question was generally quite poorly answered. Although many students could gain some credit by defining what peer review is, very few demonstrated a detailed understanding of the processes or the purposes of it, with the majority achieving level 2. Many students made no reference to publication and saw it as a simple checking method, often with the misconception that it involves the reviewer repeating the study. Stronger students gave the process and then proceeded to give its purpose, whereas weaker ones wrote all they knew, including pre-learned evaluative points that did not gain credit. Despite some impressive answers that showed detailed knowledge of both process and purpose, overall students had very limited or no practical understanding of what peer review involves and teachers are encouraged to address this.

Question 20

This was a well-answered question with almost 90% of students achieving two or three marks. Most students knew disadvantages of questionnaires but lacked an understanding of observations, often stating that they were better as the "*researcher could see for themselves*". Weaker students merely paraphrased the stem, stating *"people's perception of how they spend their time in the gym is often not very accurate*".

Question 21

Students generally did reasonably well on this question. Types of observation were generally understood and justified. Weaker responses sometimes lacked detail/explanations. Behavioural categories were generally poor and operationalisation was rarely evident. Time/event sampling was often stated but for their use was absent or muddled. Confusion was often evident, particularly in relation to time sampling (often mistakenly presented as how long a behaviour lasted). Reliability was often covered well with detailed descriptions of inter-rater reliability given. However, test-retest was frequently suggested inappropriately as a way of assessing reliability and students confused the purpose of assessing reliability with ensuring reliability. Unfortunately, students frequently focussed on additional material, such as ethical issues, sampling of participants, etc, at the expense of covering all the bulleted requirements successfully. Furthermore, some students designed a complete study and a few wrote a whole report, including abstracts, statistical analysis, etc. However, these did not receive credit.

Use of statistics

Statistics used in this report may be taken from incomplete processing data. However, this data still gives a true account on how students have performed for each question.

Mark Ranges and Award of Grades

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

Converting Marks into UMS marks

Convert raw marks into Uniform Mark Scale (UMS) marks by using the link below.

UMS conversion calculator