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General Certificate of Education

Psychology 2181

Specification A

Unit 3 (PSYA3) Topics in Psychology

Report on the Examination

2010 examination - June series

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Unit 3: (PSYA3) Topics in Psychology

General Points

This summer, for the first time, this unit was marked on screen, with candidates' scripts scanned in electronically. This procedure raises some important points that candidates must remember:

- Illegible writing or writing in faint pen makes marking extremely difficult, and at the very least delays the whole process.

- Questions MUST be numbered correctly and clearly in the answer book. Answers are scanned in separately, so it is also advisable, besides numbering each question clearly, to leave at least a few lines between the answer to separate questions so it is clear where one ends and the next begins.

- It is no longer possible for examiners to 'export' material that is irrelevant in one question to another question where it may earn marks as they will usually see only one question from a particular candidate. Therefore candidates need to read questions very carefully and provide the material that is relevant to that question, in particular providing commentary and evaluation in a question that requires description will not gain any credit and will not be exported.

The balance between AO1 and AO2/AO3 marks has changed significantly, with 9 AO1 as against 16 AO2/AO3. Examiners do not expect nearly twice as much AO2/AO3 as AO1, but to reach the higher bands AO2/AO3 material must be used effectively and demonstrate a clear line of argument. Too many candidates are still relying on basic methodological evaluation of studies, without bringing out its relevance eg whether it makes the findings/conclusions less valid and reliable. For many questions the most effective AO2/AO3 material focuses on interpretation of the *findings* of studies, and brings out their relevance for theories/explanations. This is the most fundamental aspect of 'How Science Works'.

Besides the altered balance in AO1 versus AO2/AO3, the other major change in requirements on PSYA3 is the need to refer to issues, debates and approaches (IDA) where relevant. As in January 2010 there were three main approaches adopted by candidates. In the first the requirement was simply ignored. In the second, issues, debates and approaches had been largely rote learnt and were simply thrown in at regular intervals, with little regard for their relevance to the rest of the answer. Occasionally candidates would provide a closing paragraph of IDA; this made it difficult for them to contextualise the material and to demonstrate clear understanding of its relevance.

The most effective approach was found in answers that referred to IDA at appropriate points and which demonstrated clear understanding of their meaning and relevance. Assessment is based on such understanding, especially as different topic areas vary in the accessibility of such material. Candidates could do extremely well, accessing the higher AO2/AO3 bands, by providing sustained and effective use of a limited number of issues, debates and/or approaches.

One problem with issues and debates that arose in January 2010 and was even more obvious in this sitting was the misuse of the term 'reductionism'. This was regularly used to refer to approaches that focused on a *single* model or explanation, such as cognitive, psychoanalytic, evolutionary or behavioural. Such approaches may be criticised as narrow or limited, but they are not necessarily reductionist. The term 'reductionism' came from biology, and refers to explanations at the lowest and most detailed level; for instance, studying the functions of the

liver by studying individual liver cells, or the functions of the brain by examining individual neurons. In psychology, the term is most appropriately applied to biological explanations (eg genetics, neurotransmitters, hormones) of complex human behaviours such as schizophrenia, eating disorders and aggression. Such reductionist explanations can be legitimately criticised as ignoring psychological, social and cultural factors. However, the social learning theory of aggression or anorexia nervosa is not reductionist because it ignores genetic factors; it is narrow or limited.

Other forms of reductionism in psychology include behaviourism and the way it reduces complex behaviours to simple learning principles, and methodological reductionism, in which the scientific approach requires some complex behaviours to be reduced to simple variables that can be controlled and investigated. Wherever it is used, candidates need to show a clear understanding of its meaning for 'reductionism' to earn marks.

Finally, candidates must take note of the mark allocation for each question as they may vary between questions. Candidates need to allocate their time appropriately; 4 or 5 mark questions do not require answers of over a page, while questions with 5 AO1 and 16 AO2/AO3 marks require less AO1 material than questions with 9 AO1 and 16 AO2/AO3 marks.

While the new Specification has placed different demands on students, many candidates and centres produced extremely impressive answers, with detailed and accurate AO1 and sustained and effective AO2/AO3. Examiners are looking for knowledge and understanding, and these remain the key to good marks.

Topic Biological Rhythms and Sleep

Question 01

This was done reasonably well. Many candidates could refer to the changes in REM sleep between birth and old age, and there was often impressive detail of parallel changes in NREM/slow wave sleep over the lifespan. Changes in sleep patterns during adolescence were quite popular but sometimes lapsed into anecdote. Some candidates wasted time by introducing commentary and evaluation or by describing the different stages of sleep, material that was not creditworthy.

Question 02

Answers to this question split evenly between evolutionary/ecological accounts and the restoration approach. Many candidates missed out on AO1 marks by providing only brief descriptions of the chosen explanation. Effective evaluation of the restoration explanation relied on research findings, although the implications of the popular single case studies (eg Randy Gardner) were sometimes not fully understood. Candidates referring to controlled laboratory studies generally provided more effective answers.

Evaluation of the evolutionary/ecological approach tended to be less organised, but some candidates made excellent use of some of the cross-species analyses of sleeping habits. They could quote correlations between sleep patterns and eg predator-prey status, sleeping niche, brain size, metabolic rate etc. Some weaker answers did not focus on a single explanation but provided general surveys of different explanations; alternative explanations could be used as effective evaluation, but this was rare.

Topic Perception

Question 03

Most candidates could provide descriptions of Gregory's top down and Gibson's bottom up theories, with answers varying in the level of detail and accuracy. Outlines of Gibson's theory in particular were often highly impressive with coverage of many aspects of the optic array. Weaker candidates provided less detail and occasionally mislabelled the two theories. Despite the clear separation of the topic into two questions, some answers included evaluative material in this question that was not creditworthy.

Question 04

Candidates evaluating Gibson tended to access relevant research studies more easily than those evaluating Gregory. Better answers covered the classic visual cliff studies along with cross-cultural work, and linked findings back to the bottom up theory, often via the nature-nurture debate. Application of Gibson's work to pilot training was used in many answers as a novel and creditworthy issue/debate. Visual illusions featured prominently in evaluation of Gregory, along with studies of the effects of motivational state and expectancy on perception and the artificiality of some of his studies.

Although not that popular, answers to this topic demonstrated an impressively high level of preparation by centres.

Topic Relationships

Question 05

Answers to this popular question varied greatly. At the weaker end candidates were clearly prepared for a different question and had to try and shape material on relationship formation (especially equity theory) and breakdown to cultural issues. This was usually unsuccessful. Slightly better answers outlined many differences in the nature of relationships in individualistic cultures as compared with collectivist cultures, but did not evaluate them effectively in terms of research evidence and/or higher level commentary. Some answers verged on the anecdotal, and there was often confusion between 'arranged' and 'forced' marriages.

At the top end candidates were able to describe cultural differences in relationships and support their observations with specific cross-cultural research evidence on the nature of relationship formation, the role of 'love' in relationship formation and maintenance, and attitudes to divorce. They could often provide higher level commentary on changes (or not) in the nature of relationships in immigrant communities.

A few candidates chose to focus on gay and lesbian relationships. This was a legitimate approach, given the wide definition of 'culture', and such answers could access the full range of marks.

Topic Aggression

Question 06

There were a range of answers to this question. The XYY karyotype was popular and creditworthy, although many went on to mention that recent evidence puts doubt on its relation to aggression. More convincing material covered studies with MZ/DZ twins, and breeding experiments with dogs and rats. At the top end candidates referred to genetic control of neurotransmitter levels and hormones such as testosterone. However a common error was simply to describe the role of neurotransmitters and hormones without reference to any genetic involvement; levels of these chemicals can vary with non-genetic factors. Some candidates wrote far too much given the limited number of marks available.

Question 07

Social learning theory (SLT) and deindividuation were the most popular social psychological theories of aggression. A common error, in contrast with question 6, was to provide little or no detail of the theory, so limiting access to AO1 marks. Deindividuation in particular still seems poorly understood by many candidates.

Evaluation was usually in the form of research evidence, with Bandura's Bobo dolls routinely used in support of SLT. Many answers provided detailed methodological evaluation of Bandura's studies, but failed to access the higher bands for AO2/AO3 as the relevance to the question was not made explicit – how do these points affect the degree of support for SLT? Better answers tended to provide a broader range of evidence, for instance using studies of media influences on aggressive behaviour. There was often anecdotal reference to criminal cases such as James Bulger. As part of 'How Science Works' candidates should be aware that such observations are of little value in assessing explanations of aggression.

Answers focusing on deindividuation used Zimbardo's work extensively and often effectively. They still tended to become bogged down in methodological issues, but the quality of essays using deindividuation has steadily improved over the years. It was impressive that some candidates could point out that the Prison study can be interpreted in a variety of ways.

Topic Eating Behaviour

Question 08

Although anorexia nervosa was the most popular focus for this question, there were a substantial number of answers on obesity, and rather less on bulimia nervosa. A common weakness was to begin the answer with detailed descriptions of clinical characteristics and symptoms which were not linked to explanations. However, in general candidates showed impressive awareness of a range of explanations for their chosen disorder. These included evolutionary/genetic factors through neurotransmitters and brain systems underlying feeding behaviour, to psychodynamic, social and cultural factors. AO1 marks were often in the top two bands.

Evaluation in the higher bands used research evidence effectively, although some candidates still fail to fully understand the use of MZ/DZ twin studies; it is critical that findings from studies are effectively linked to specific explanations. As all disorders have a variety of alternative explanations this is an excellent area for issues and debates. However these were often presented in rudimentary fashion with no evidence of clear understanding; this was particularly evident for reductionism and determinism.

Topic Gender

Question 09

There was a great deal of confusion over the biosocial approach. This involves the interaction between genetic determination of biological sex and social/environmental factors that lead to the development of gender identity and gender role. Many candidates ignored the biological aspect and simply described social factors, while a significant minority simply left this question out. Other candidates handicapped themselves by writing far too much for this question, even including research evidence and evaluation.

Question 10

This straightforward question was usually done well. Simply stating factors such as parents, peers and media did not access the top band, but limited elaboration of two or three factors was often sufficient.

Question 11

There were some excellent answers to this question, with detailed and relevant reference to studies on the influence of parents, teachers, peers and the media in the development of gender roles. Cross-cultural research was less popular but often an effective route to AO2/AO3 marks. Findings in better answers were linked explicitly to the question. Weaker answers tended to be less detailed ('research has shown that...'), verging on the anecdotal. This was another area where issues, debates and approaches were relatively accessible, and at the top end nature-nurture and gender biases were contextualised and used effectively.

Topic Intelligence and Learning

Question 12

There was a wide range of answers to this question. It was clear that some candidates were unprepared for this topic and could not identify psychometric and information processing theories of intelligence. Other candidates identified Spearman's work as a psychometric approach but spent far too much time describing IQ tests rather than the theory behind them. Better answers referred to 'g' and specific factors, or described crystallised and fluid intelligences. Sternberg and Guilford were popular information processing theories, but the level of accurate detail was variable and often confused.

Question 13

There were some excellent answers to this question. Some candidates focused on psychometric approaches and the nature of IQ. This enabled them to introduce controversies over the nature of IQ, the validity of IQ tests, applications of IQ testing, the nature-nurture debate, and issues of gender and cultural bias. Effective evaluation of information processing approaches usually focused on the breadth of the approach along with problems of measuring different types of intelligence.

Weaker answers were usually too vague, providing general essays that sometimes failed to identify which approach they were actually evaluating. It is essential that candidates read the specific question and frame their response accordingly.

Topic Cognition and Development

Question 14

Again there was much variability in answers to this question. At the top end candidates provided detailed accounts of both Vygotsky and Bruner, including outlines of modes of representation and the development of internalised speech. Weaker answers tended to provide reasonable overviews of Vygotsky but were limited in their descriptions of Bruner's theory. There were some examples of partial performance, with only Vygotsky's theory outlined. This demonstrates the need for the whole Specification to be covered for each sitting of PSYA3.

A significant minority of candidates introduced evaluative material, such as applications of these theories to education, which could not be credited in this question.

Question 15

The most effective evaluation was the use of research findings on the effectiveness of scaffolding, the existence of the zone of proximal development, and the development of enactive, iconic, and symbolic representation. Applications to education were also popular. In line with question 14 candidates were on the whole happier with evaluating Vygotsky than Bruner. Some answers introduced Piaget's theory and a few used it as part of sustained and effective commentary; usually, however, it was not used as relevant AO2/AO3 material. References to cultural aspects of Vygotsky's work were popular and better answers elaborated on this and explained its relevance to the development of Vygotsky's theory.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results Statistics page of the AQA Website: http://www.aqa.org.uk/over/stat.html