**General Certificate of Education (A-level)
June 2011**

Psychology A   **PSYA3**

(Specification 2180)

Unit 3: Topics in Psychology

Report on the Examination

Unit 3: (PSYA3) Topics in Psychology

General

There were many very good scripts with candidates showing good awareness of the demands of this paper and how to achieve high AO1 and AO2/AO3 marks. However there are still candidates who fail to appreciate some of the basic requirements, in particular the relationship between explanations/theories and research studies, and the need for AO2/AO3 and IDA (issues, debates and approaches) material to demonstrate real understanding. These effects tend to be centre specific.

Research studies are used to evaluate explanations/theories, and findings from research studies should be the basis of many answers. If the question is on 'explanations' (eg question 07), then after outlining explanations or theories as the AO1 material, then findings from studies can be used as evaluation. If the question is on 'studies' (eg question 09), then describing studies and their findings is the AO1 material, and implications of findings for theories/explanations would be an important part of AO2/AO3 material. However, whatever the question, too many candidates spend far too long on methodological evaluation of studies. Methodological evaluation can be effective if implications for the reliability and validity of findings are clearly described. Too often, though, the evaluation is list-like, repetitive and not effective. In some cases it is simply incorrect, with experimental studies being criticised for being correlations, or described as 'reductionist' or 'determinist'; studies on their own cannot be reductionist or determinist.

Allied to this is the use of issues, debates and approaches (IDA). One or two issues or debates used effectively can contribute significantly to commentary and lift an answer into the top band for AO2/AO3. Instead many candidates simply list issues and debates in the hope that some will be relevant. It is not effective, for instance, to say that findings from non-human animal studies cannot be generalised to humans. Of course they can, with caution. At the top end candidates were able to point out that studies with humans actually supported findings from animals (eg the role of testosterone in aggression), providing a good overview of hormones in aggression. Similarly all theories/explanations in psychology are 'deterministic', in that they explain behaviour. This criticism should only be used where it is clearly effective for example in biological explanations for aggression where the debate over free will has implications for how we view criminal violence.

'Gender bias' is another issue often used in the wrong place. Studies on testosterone and aggression are not biased. It is simply a matter of fact that males have more testosterone than women and research indicates that it has an important role in male aggression. Better candidates were able to point out that women can be aggressive too but explanations might be different to those for male aggression. Finally, 'cultural bias' is also commonly misused. Most studies are done in one place and are therefore limited. It is only when findings are generalised to other cultures that bias might come in; this can be important in areas such as relationships, but not so much in biological explanations of behaviour or in models of face perception.

The strong message is that candidates will only earn AO2/AO3 marks by presenting critical evaluation that demonstrates understanding of the material. For any topic, one or two issues and/or debates clearly relevant to the material and used effectively is far better than a rote-learned list tacked on to every answer.

Several topics had two 'sub-questions'. On the whole candidates coped well with these, although a few did not allocate their time appropriately. It is critical that candidates look at the mark allocations for AO1 and AO2/AO3. It was also clear that some centres did not cover all of the specification, but relied instead on 'question-spotting'. This handicaps their students considerably and is not a sensible tactic where the move to more use of 'sub-questions' has been clearly signalled and put into operation.

Topic: Biological Rhythms and Sleep

Question 01

This question was done well, with a range of acceptable material. Most candidates presented the EEG stages of sleep, with answers varying in the level of accurate detail of the stages and of the ultradian rhythm of REM and NREM. Explanations for the functions of sleep were also popular, although these tended to lack accurate detail and also encouraged candidates to introduce irrelevant AO2/AO3 material. Common problems with this question were for candidates to write far too much or far too little for 9 marks. Time management is a crucial aspect of the examination.

Question 02

This question was also done reasonably well. At the lower end, candidates tended to review examples of disruption, such as jet lag and shift work, at a purely descriptive and almost anecdotal level. Better answers outlined examples of the consequences of disrupting biological rhythms and then expanded on this material. By reviewing research evidence on, for instance, the health consequences of jet lag, or by considering the applications of research findings to reduce the consequences of disruption. A minority of candidates used sleep deprivation studies as their key material. As long as the explicit focus was on sleep deprivation as an example of the disruption of biological rhythms these could earn marks across the range. However there was a strong tendency for answers to be diverted into long methodological evaluation of studies, which could earn only limited marks.

Topic: Perception

Question 03

This is not a popular topic, and answers tended to be either very good or extremely weak. At the top end, candidates could provide impressive detail of the Bruce & Young model and most of its key components. Diagrams were often used effectively. Weaker candidates could refer to one or two elements, such as Person Identity units or name generation, but had no real idea how components interacted or the sequence of processes in face recognition. Evaluation was mainly through research evidence, in particular in cases of prosopagnosia. Better candidates understood the implications of findings and could also refer to problems with case studies. Weaker answers failed to show understanding of studies and their findings. Evaluation was often very superficial and/or wrong. In many cases a single case study accurately described and interpreted would have transformed AO2/AO3 marks.

Topic: Relationships

Question 04

A very popular question with a range of answers. There were many relevant references to Bowlby's research, the internal working model, and the continuity hypothesis. Unfortunately a proportion of answers presented long descriptions of Ainsworth's work on attachment styles and then evaluated this research, rather than focusing on the actual question of adult relationships. On the other hand the work of Hazan & Shaver and the 'love quiz' was usually used effectively, although there was a tendency for methodological evaluation of this study to be overlong. Most candidates considered adolescent experiences but these tended to be

used less effectively than childhood. Candidates tended to be diverted into adolescent relationships, changes in relationships with parents, and gender differences in adolescent relationships, without explicitly bringing out the relevance for adult relationships. At the top end, answers used research evidence such as longitudinal studies of attachment styles, very effectively.

A minority of candidates had clearly prepared inappropriate material on relationship formation and/or evolutionary explanations. These earned marks insofar as the material was made directly relevant to the question. One or two enterprising candidates used the later adolescent and adult development of Genie and the Koluchova twins as an example of the effect of early experience on adult relationships.

Topic: Aggression

Question 05

A popular topic with a number of extremely impressive answers. A few candidates did not distinguish between neural/hormonal and genetic mechanisms and presented answers on genetics that were not relevant to the question. Those candidates that could outline the link between the MAOA gene and monoamine/serotonin levels did earn credit. Most answers outlined the role of serotonin, dopamine and testosterone in aggression. Also mentioned were cortisol and noradrenaline. Neural mechanisms were less popular, but there some extremely impressive answers on the role of limbic mechanisms, amygdala and prefrontal cortex in aggressive behaviour.

Although most candidates could use research evidence effectively as AO2/AO3, only a minority actually earned reasonable AO1 marks. These were awarded for a description of the role of neural/hormonal mechanisms in aggression, but usually this consisted simply of naming a hormone or part of the brain. There needed to be some elaboration for reasonable AO1 marks for example the origins and general role of testosterone, or an outline of the structures that make up the limbic system and their involvement in behaviour.

Evaluation was usually through research evidence and often effective, with many candidates able to bring together findings from several studies. It was a common comment that findings from non-human animals could not generalised to humans. They can, of course, with caution, and it is particularly impressive if a range of findings in different species is consistent.

Topic: Eating Behaviour

Question 06

Anorexia nervosa was the most popular disorder considered and the media/social learning approach was the most popular explanation. The question was answered moderately well though many answers lacked sufficient detail of the psychological processes involved to move into the top bands. Technical terms such as observational learning, modelling, vicarious reinforcement etc should all form part of an outline of the role of SLT in any behaviour. Psychodynamic explanations were usually more impressive, with the roles of enmeshment and over control accurately outlined. Obesity and bulimia nervosa were less popular, but the socio-cultural explanation of obesity was used effectively by some candidates. A significant minority of answers were either too long or too short for the marks available, and in some cases presented AO2/AO3 material that did not earn marks.

Question 07

Although many candidates knew a good deal of relevant material, the organisation was often ineffective. AO1 consisted of evolutionary explanations but many answers launched into various studies without presenting the broader perspective of explanations. However there were many impressive answers that reviewed the evolutionary approach to food preference, referring to dietary needs and food availability in the EEA, the range of taste receptors, anatomy of the digestive tract etc. The embryo protection hypothesis was also popular. Studies were used as evaluation, with the work of Garcia and others on taste aversion learning and neophobia were very popular. At the top end candidates used counter evidence for the role of familiarity, parents, peers and culture effectively; although in some cases they spent too long on material not related to the question. There was often some sensible commentary on the range of factors that influence contemporary western diets and the role of evolutionary impulses in the increasing level of obesity.

Weaker answers demonstrated little understanding of evolution or of the evolutionary perspective on food preference.

Topic: Gender

Question 08

Although this topic has not been examined before, many candidates seemed completely unprepared for it, to the extent that there were comments on scripts that the candidate had not heard of the term before seeing the exam paper. There is no excuse for this. The general level of performance was unimpressive, with many answers confusing androgyny with gender dysphoria and describing some of the dramatic case studies on gender reassignment. These did not earn marks. Another problem for some candidates was the time spent on describing and evaluating Bem's BSRI, which was not directly relevant to the question.

Better candidates were able to review the proposed psychological benefits of androgyny that are considered to account for this gender style, and evaluate these using research evidence. Further commentary could include socio-political aspects of gender roles and how they change over time. Some answers used social learning theory and parental modelling as possible explanations for androgyny, and these could earn marks across the scale depending upon the level of accurate psychological detail.

Question 09

This was a straightforward question but answers on the whole were disappointing. Most candidates relied on Mead's cross-cultural work, which was described with various degrees of accuracy. Methodological evaluation was often comprehensive but relatively few candidates discussed implications of findings for the nature-nurture debate in the development of gender roles. Better candidates introduced contradictory evidence from other cultures but again evaluation tended to be methodological rather than considering the implications of findings (although some exceptional candidates did discuss the notion of intra-cultural as well as inter-cultural differences). Studies were often criticised as 'culturally biased'. This shows a basic misunderstanding of cross-cultural research, whose aim is to show similarities and differences between cultures, not impose findings from one dominant culture on to all cultures.

Topic: Intelligence and Learning

Question 10

This is not a popular topic, but there were a range of answers, from some basic and weak attempts to some very impressive reviews of the evolution of human intelligence. Factors such as bipedalism, foraging range, meat eating, hunting, group size and social interaction, tool use etc were discussed in the context of the development of human intelligence and the success of the human species. Fossil evidence was used effectively in better answers, as was Dunbar's work on group size, brain size, and intelligence. Some candidates focused more on brain size, and unless the implications for human intelligence were also explicitly discussed, these could earn only limited marks.

A minority of answers discussed the inheritance of IQ and the nature-nurture controversy. It was possible for such answers to earn marks if they were linked to evolutionary factors and not simply 'genetics', but this was rare.

As with question 07 there were a number of candidates who do not understand the basic principles of human evolution and the link between slight mutations, the acquisition of new skills and characteristics, and reproductive advantage. This clearly limited the marks they could access on questions such as question 10.

Topic: Cognition and Development

Question 11

This topic has not been examined before and there were clear centre specific effects, with some showing excellent knowledge and understanding and others clearly and completely unprepared. Better answers outlined the proposed role of mirror neurons in action understanding, their possible distribution in the brain, and how they might be involved in the development of theory of mind and in clinical conditions such as autism. Evaluation was usually through research evidence, from the early work on monkeys to later scanning studies on the human brain. General commentary often referred to the lack of direct evidence for mirror neurons in the human brain (the use of 'mu' desynchronisation as a measure of mirror neuron activity in the human EEG), and their proposed general role in social cognition, theory of mind, and empathy.

Weaker answers were muddled and confused, showing little understanding of mirror neurons and their proposed functions in the brain.

Question 12

The vast majority of answers outlined and evaluated Kohlberg's theory of moral understanding. The general standard was good, with some excellent descriptions of the stages of moral development and Kohlberg's methodology. One weakness was for candidates to spend far too long outlining the stages and the dilemmas in great detail, forgetting that only four AO1 marks were available for this question. Better candidates were able to use research studies effectively, and then introduce some general evaluation in terms of, for instance, culture and gender bias, using the work of Gilligan, for instance, as AO2/AO3 material. A few candidates used Eisenberg's model in a similar way.

Weaker answers presented inaccurate detail of Kohlberg's model and generally lacked research evidence. AO2/AO3 was limited to general and usually superficial comments.

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

UMS conversion calculator www.aqa.org.uk/umsconversion