PSYCHOLOGY (BHP315116)

FEEDBACK FOR STUDENTS AND TEACHERS

It is recommended this report be read in conjunction with previous examination reports for BHP315116, available on the TASC website.

GENERAL COMMENTS

In all sections of the examination, the more successful candidates are being thoroughly prepared to be able to demonstrate comprehensive knowledge and understanding of the topics, perspectives and concepts examined. Candidates are able to analyse and evaluate stimulus materials, relevant human research/empirical evidence as well as classic studies.

This year there was an appearance of many formulaic responses, following the same pattern with a disregard of question specifics. Higher quality responses fully addressed all parameters of the specified question within the set time frame.

The Investigation Project raised some ethical concerns of which both candidates and teachers need to be aware. These issues relate to the methodology used in the research design and the selection of the participant group. Candidates choosing to use young children and those under the age of 18 years as participants, must comply with the essential ethical requirements.

SECTION A – REMEMBERING

QUESTION 1 – MEMORY

Candidates who did well on this question comprised well written responses supported by both theory and empirical evidence and showed their understanding with an excellent integration of both stimuli. Candidates are reminded that good evaluation involves both theory and evidence.

CRITERION 4

Sound responses were able to comprehensively define the concepts in part (a) and outline the key theories of memory, as well as analyse and evaluate these. Effortful encoding was successfully linked to Stimulus 2 and long term memory to Stimulus 1. Strong responses also successfully linked LOP to stimulus 2 and some candidates also linked long term memory to Semantic Network Model.
Candidates should be mindful that the “dot pointed” terms of either (a) or (b) of the question must always have an extended explanation. Some responses seemed to miss one or more in detail.

Some candidates used diagrams of the models to convey meaning. In some instances this was done effectively, although it is encouraged, if used, to ensure that diagrams are explained and discussed, and are instrumental in the discussion.

Candidates who did poorly on this question provided answers that were descriptive in nature, not really explaining the concepts or ideas or presenting any evaluation. The structure, in some cases, lent heavily on sources such as “simplypsychology.com”. Candidates are to be mindful of relying upon systematic memorisation and ensure they engage with the stimuli and questions provided.

CRITERION 7

In answering this question as with all questions on the paper, candidates should plan their responses carefully and leave out any information which is not relevant to the question.

Candidates who achieved well on this criterion were able to clearly refer to the stimulus, but also add to the information given and not merely summarise what was provided. Good responses also referenced key empirical evidence and theorists.

Candidates who did well included information on different theories to support their discussion – Multi Store Model, Working Memory, Semantic Network Theory and Levels of Processing were all used with additional supporting empirical evidence. Stimulus 2 was used well and connected effectively with attention, long term memory, effortful encoding and the LOP model. Candidates who did poorly relied too heavily on Stimulus 1 – using it as their only source of information regarding the Working Memory Model.
QUESTION 2 – FORGETTING

Candidates who did well on this question not only answered from the perspectives of organic/non-organic causes of forgetting, but were also able to explain the difference between these psychological and physiological causes and evaluate interference theory and other theories.

CRITERION 4

Candidates who did well addressed the question directly clearly demonstrating understanding of causes of forgetting or their relationship to the two stimulus pieces. Better responses were able to evaluate by commenting on the prevalence and severity of organic causes in comparison to non-organic causes.

These responses went beyond the examples given in the stimulus items, provided evidence and linked to other concepts. Candidates would have benefited from an attempt to provide and evaluate the evidence, either from the stimulus items or something provided by the candidate. There appeared some confusion about proactive and retroactive interference as well as Decay Theory. Candidates who were able to link dementia to organic forgetting, Alzheimer’s disease, Korsakoff’s syndrome or amnesia (both anterograde and retrograde) were rewarded.

Better responses went beyond an explanation of mnemonics and providing some real-life examples of acrostics, peg word or the method of loci, to include discussion of elaboration (including self-referencing, visual imagery, semantic encoding), consolidation, and chunking, to improve recall.

CRITERION 7

Some responses were able to use the stimuli to illustrate the meaning of a particular concept or cause of forgetting. To demonstrate understanding requires more than repeating the information from each stimulus item or writing ‘see Stimulus 1’ without explicitly mentioning to which part of the stimulus the candidate is referring.

Candidates would have benefited from using evidence (beyond the stimulus items) to support the different explanations of forgetting. Stronger responses were able to provide a range and combination of appropriate real-life examples or anecdotal descriptions of case studies AND
empirical evidence in support of theories. Candidates are also reminded that all concepts should be defined and applied to the stimuli.

SECTION B

QUESTION 3 – CONDITIONING

Generally, there was much more emphasis on the classical conditioned model by candidates with too little information on the applications of operant conditioning to HUMAN learning. Candidates should ensure that they address the question asked and that any examples given are specific to the question. Many candidates showed substantial preparation and presented relevant evidence, however the evaluation aspect of this question was rarely attempted. Of concern, was the brevity of answers, especially when the bulk of this was on the retelling of Pavlov’s experiment and a recounting of the stimulus content.

CRITERION 3

Candidates were required to synthesise information and apply knowledge of classical conditioning to explain classical conditioning as a contributing factor to the development of specific phobia (fear of balloons) and the generalising of this fear response to other similar triggers (beach balls). Most candidates correctly identified Danny’s balloon phobia as classical conditioning and his fear of beach balls as generalisation, as well as token economies as operant conditioning. Stronger responses included some explanation of the importance of order of presentation in classical conditioning and timing. Generalisation and discrimination were well identified and discussed supported by the Watson and Rayner study.

Strong responses went further than simply listing the key elements of OC and CC. Weaker responses tended to retell the stimuli, especially in terms of token economies. Many candidates described the experiments they used as evidence, rather than analysing them, whereas candidates who analysed the stimuli were rewarded.

Many candidates mentioned important terms, such as shaping, neutral stimulus without explaining what they were, or they correctly identified the popping balloon as the UCS, but did
not say what an unconditioned stimulus is. Stronger candidates discussed two factor learning in terms of Danny’s avoidance of beach balls (negative reinforcement and CS).

Stimulus 2 was generally not utilised as effectively. Better responses included an accurate definition of token economies supported by research evidence and explained the shaping process. Strong responses discussed tokens as a secondary reinforcer, contrasted with primary reinforcer. Reinforcement (not ‘reward’) needed to be defined accurately, differentiating between positive and negative reinforcement. Strong responses extended discussion of reinforcement to an explanation of shaping and schedules of reinforcement, though the latter was largely listed or sometimes inaccurately explained and without supporting examples.

**CRITERION 7**

Candidates often detailed at length animal studies, such as Pavlov’s dogs, Skinner’s rat and Thorndike’s cats. While much knowledge of classical conditioning and operant conditioning is derived from animal studies, the unit is HUMAN LEARNING, and so the focus should be on how these theories apply to human learning. Several sentences to summarise classic animal research is all that was necessary.

Candidates benefitted from being able to give real-life examples supported by research evidence. Stimulus 1 was used very well. However, quite a number of candidates failed to explicitly mention the emotional conditioned response in ‘Little Albert’ to draw a comparison between Danny’s balloon fear in Stimulus 1.

Candidates who did well on this question were able to explain processes such as Wolpe’s Systematic Desensitisation and evaluate its effectiveness by comparing in vivo (life) versus imagined exposure to a phobia.

Stronger candidates successfully extended commentary to human research in operant conditioning related to gambling and behaviour modification (though candidates over-indulged in lengthy discussions of Allen’s ‘shy-girl’ at the expense of offering broader examples.)
QUESTION 4 – OBSERVATIONAL / COGNITIVE LEARNING

Most candidates who attempted this question showed a good understanding of the topic and were able to cover most aspects in detail. Only a few candidates made the link that observational learning is also a form of cognitive learning.

CRITERION 3

Candidates who did well on this question were able to define and explain the concepts of observational learning with the stimuli. However, some candidates were unable to link or apply further knowledge to the stimulus, alluded to the idea that the concepts were there but did not highlight them. Most candidates could differentiate between symbolic and life models and presented examples.

Many candidates spent time explaining “vicarious learning”, punishment and reinforcement, maybe because it was the title of stimulus 2 and most were able to explain these concepts accurately and in detail. Better answers highlighted that each of the learning areas are linked and work together, and in the real life examples they cited, that point was acknowledged. Some candidates did mention that conditioning occurs in observational learning.

CRITERION 7

All candidates were able to give examples of cognitive learning and showed a solid understanding of the area.

Although both stimuli were on Observational Learning, candidates were still able to explain cognitive learning and were able to cite the processes in observational learning and cognitive learning. Better candidates were able to use stimulus material, especially Stimulus 1, to illustrate the concepts involved in Observational Learning. Stimulus 2 provided plenty of examples that candidates used to explain modelling.

Candidates would have benefited from including human examples for the cognitive learning theories that do not have human research. Some candidates went to lengthy explanations of Tolman’s and Kohler’s experiments in detail, perhaps to the detriment of using their time to
include human examples. Weaker responses commonly just reiterated the BoBo Doll experiment without any explanation or link to the question asked.

SECTION C – INDIVIDUAL DIFFERENCES

QUESTION 5 – GENDER

Most candidates started their response well, often by differentiating between sex and gender in their introduction, and stated the theories/argument that they would present. Stronger candidates were able to debate the nature/nurture argument – with relevant theories and appropriate supporting evidences. The question allowed stronger candidates to demonstrate their knowledge of the topic, and integrate the concepts, stimulus items and evidence to provide a logical flow. Evolutionary theory was incorrectly cited by many candidates as an example of the nature (biological) argument.

CRITERION I

Candidates were able to respond to the concepts in the question, and stronger responses then linked these to other relevant concepts, and placed them well in relevant theories. Gender identity could have been used better by making more connections to this concept throughout written responses.

Candidates who did well evaluated theories by providing some critique, but also by positioning theories in relation to each other, and also sometimes in relation to the stimulus items.

Biological arguments were generally well handled by candidates. It was understood that they had to address both biological and social. Social learning and bio-social theories were the most commonly presented theories. Some candidates drew on social role, socialisation theory, cognitive development (discussed stages well), and gender schema. Biological argument was often incorrectly identified as a theory. Interactionist theory was often cited by candidates but could have been explained better. Most candidates placed this theory as a conclusion, if they presented it.
CRITERION 7

Most candidates responded well to the stimulus items and concepts in the question, which demonstrated their sound understanding of what they needed to do. More use of words from the question, such as “genetic and environmental factors” in responses would help to demonstrate that candidates are responding directly to the question.

Candidates who did well used evidence for effect, often writing one sentence and placing it in a theory. Weaker candidates would provide more detail than needed on key pieces of evidence (e.g. David Reimer, Batista Boys) but did not connect these to the stimulus or theories all that well.

The case of David Reimer and Money’s work was generally well handled, and candidates were able to use this as evidence in relation to more than one theory, and was often linked to gender identity in stronger responses.

Stimulus 2 was well used by candidates, often quoting from the stimulus and then linking this to biological argument, but also drawing a link to social influences with reference to sculpting a complete response.

Weaker responses tended to concentrate answers on stimulus items rather than using the stimulus to support their ideas. In some cases the text in the stimulus item was repeated. Successful candidates would cite short extracts from the text, and often relate this to other evidence (e.g. stimulus 2 linked to research by Kimura).

QUESTION 6 – INTELLIGENCE

Overall the Intelligence responses were polarised between some very strong responses and weak responses. Candidates who did well were able to position their response in the context of the nature of intelligence and related concepts such as I.Q., intelligence testing, test biases and polygenic traits. Some candidates discussed the three perspectives of Biological (Genetic), Environmental and Interactionist.
CRITERION 1

Candidates who did well provided a definition of intelligence and explicitly defined and explained all three terms, providing examples and/or integrating these explanations into the course of their response.

Most candidates were able to apply the stimulus well to the nature/nurture debate and the terminology. More specific analysis of the stimulus was often needed to make connections between evidence and argument. This was often also the case when providing outside evidence.

Many candidates did not explain/address all of the specified terms-concepts (in this case, enrichment, heritability, intellectual potential). Many candidates mistook the term ‘heritability’ to mean ‘hereditary’ or ‘heredity’.

There were a number of responses stating that intelligence is influenced by age, race and gender. This is misleading and should not be discussed without qualifications regarding I.Q. testing. It is widely recognised that ‘race’ is not a genetically valid category, as there is greater intra-racial genetic variety than there is inter-racial genetic variety. Turkheimer’s research on the heritability of IQ and SES highlights the importance of environmental advantage/disadvantage on cognitive development. Flynn suggests that IQ tests are a measure of “our adaptation to modernity”. Intelligence is not rising; IQ test scores are rising – in developed and developing countries.

There seems to be some lack of understanding about the role of the environment among some candidates - the role of environmental influences is not limited to making up for poor genetics.

CRITERION 7

Generally candidates did well at discussing the stimuli, and also relating both stimuli to some additional research. Evidence was, overall, well utilised (although sometimes misinterpreted).

While the use of evidence was fairly good, it was not always tailored to the question. Candidates are reminded that they must think about answering the question posed: in this case, the primary question asked respondents to, ‘critically evaluate the different influences on intelligence’.
Candidates who did well had a balance of evidence for genetics and environment; many recognised that twin studies, while providing strong evidence for the influence of genetics, also provide unequivocal evidence for environmental influences. They were able to discuss that these influences are interrelated; most researchers agree that it is no longer a question of ‘nature VERSUS nurture’ but of how the two influence one another, that can assist understanding of individual differences. Concepts such as reaction range and environmental influences were usually discussed. A few candidates mentioned the influences of genetics on our choice of environments, and/or epigenetics.

**QUESTION 7 – PERSONALITY**

Generally there were fewer candidates answering on the topic of Personality than Intelligence or Gender.

**CRITERION 1**

Some candidates were evidently well prepared for this question and were able to explain and evaluate how genetic and environmental factors influence the development of personality. Candidates who did well presented responses that not only explained the various theories of personality development but demonstrated a clear understanding of how each of these theories suggested that either genetics or the environment played a significant role in the development of personality.

Candidates would have benefited from doing more than merely summarising the theories of personality without directly answering the question posed; which was to link these theories to the debate over the influence of genetics and environment in personality formation.

**CRITERION 7**

Candidates who did well on this question were able to link in appropriate supporting empirical research studies to demonstrate how environmental factors impact on personality. Weaker responses merely listed a range of studies without being able to clearly demonstrate their understanding of the relevance of these studies to the question asked.
INVESTIGATION PROJECT

This year the unit for assessment in the Investigation Project was Psychobiological Processes. In general there were some very interesting and engaging topics; some candidates were quite innovative in their ability to think about this area of psychological research. The variety of topics was very good. There did seem to be a significant interest in colour psychology, ambiguous figures, perceptual set, Stroop Effect, attention and sleep/dreams.

The topic and methodology for investigation must be ethically sound and conducted in an ethical manner with the welfare of the participants having central importance. Approval of both topic and methodology must be obtained from the teacher before undertaking any investigation.

Ethical concerns are still occurring, particularly in relation to candidate, school and teacher and participant names appearing in submitted folios. These must be removed (redacted) prior to submission.

Candidates choosing to use young children and those under the age of 18 years as participants need the necessary consent from child, parent, teacher and principal. They may also need to hold a current Working with Vulnerable Persons registration. There is no justification for non-compliance with these essential ethical requirements.

CRITERION 2: ANALYSE THEORIES ABOUT PSYCHOBIOLOGICAL PROCESSES

Strong answers really needed to provide an analysis of the theories surrounding visual perception or altered states of consciousness. Candidates who did well located the topic of their IP within the broader context of Visual Perception or Consciousness, with some explanation of related theories.

However, many candidates neglected to adequately position their specific topic and made no references to the relevant theoretical frameworks (for example, Top-Down, Bottom-Up and Interactionist for Perception; theories of sleep/dreaming or a discussion of attention within the context of consciousness for research related to attention or sleep).
Generally there was appropriate topic selection. Successful candidates did an excellent job of applying more than a simplistic analysis to evidence and primary data. A reminder that basic terminology is placed in the Introduction (and effectively referenced).

Candidates need to ensure that they select a topic that is psychological as opposed to sociological and a few were very confused about the theories or previous research being investigated.

Stronger folios often had a strong research basis, as well as connection to relevant theoretical explanations (e.g. perceptual set and top-down processing). This was introduced in the Introduction, and then expanded on in the Discussion. Many used the Introduction to outline theories and/or concepts of psychobiological processes without clarity regarding the particular focus of their Investigation. Better Introductions clearly identified the theories relevant to the investigation, ending with a well formulated hypothesis linked to prior research findings.

Similarly, successful candidates integrated theories into their Discussion, analysing their results using relevant psychological concepts from the module. It is recommended that candidates attempt to provide a greater synthesis of their sources instead of long and detailed description of the theories or prior research.

Some folios included gender or age differences as a variable, and stronger folios were clear why they were investigating this (e.g. past research provided a sound basis). Candidates are reminded that if choosing to investigate a variable such as gender with a Perception or Consciousness topic, then the emphasis of the report must still be on the topic of Psychobiological Processes.

**CRITERION 6: USE ETHICAL PSYCHOLOGICAL RESEARCH METHODS**

Again, teachers are reminded that they must explicitly approve all experiments and studies before they are carried out and that these experiments must meet ethical standards.

Most candidates selected a research methodology that was appropriate to their hypothesis, and the Research Design and Method section of the report was set out clearly.
It was important that the hypothesis being tested was effectively addressed by the research design and a clear understanding of ethical psychological research methodology was thus demonstrated. Strong responses made a clear link between their hypothesis and the methodology chosen.

The methodology was often not as detailed as it needed to be: the method should be described such that someone could replicate the research. It was common to simply provide a very cursory explanation of the procedure and refer the reader to the relevant appendix (the instructions to participants) to figure out exactly what transpired. Candidates do not need to include definitions for methodology terms (e.g. independent variable, convenience sample, etc.). Some incorrectly referred to their primary research as a survey when they actually created an experiment.

Candidates often did not identify the research design (for example, independent groups, repeated measures etc.). Where there are experimental and control groups or conditions, these also need to be specified.

Candidates are reminded to include IV and DV in any experiment and also to check for the accuracy of these. Sometimes it was not clear what exactly was being manipulated in the experiment.

Research instruments and instructions to participants were not always included in an Appendix, and candidates did not usually explain how instruments such as surveys were designed. In some IPs, research instruments were not clearly reproduced in the Appendices.

Candidates are reminded that the use of terms ‘random sample’ (versus convenience sample), ‘proven’ and ‘statistically significant’ should be avoided when referring to the personal investigation. It is important to know the number of participants and the method of obtaining them. Low numbers of participants used in studies (10 or less) was also an issue.

Many candidates used a survey as their tool for primary data collection. However, most failed to explain how their instrument was created, especially how survey questions were designed.
Candidates were aware that ethics must be addressed, and most went to some length in explaining a range of ethical considerations. Some discussed ethical principles in general, as if they were copied from a text book and discussed theoretically, rather than explaining how these had been addressed in their individual study. The best reports applied their ethical statements directly to their study.

Ethics Consent Forms should be used with all studies involving children. Candidates who choose to use children as participants for research are reminded to be very clear regarding the process used and parental consent.

Candidates who did well analysed their results and linked these to the findings of the studies mentioned in their introduction.

Candidates are reminded that an evaluation of the process employed and collected information should not be the main focus of the Discussion section. All that is required are limitations such as the small, unreliable sample size and extraneous or confounding variables pertinent to their experiment, or the limitations of their methodology.

**CRITERION 8: COMMUNICATE PSYCHOLOGICAL IDEAS, INFORMATION, OPINIONS, ARGUMENTS AND CONCLUSIONS**

The emphasis here is on the quality of the written report.

Candidates who did well were able to link their research design to the chosen hypothesis. Most were able to set out a very clear research design and generally this was explained well. Listing the steps of the procedure as numbered dot points can be quite effective and students who used this often did it well. It was pleasing that the majority of candidates wrote in third person, used grammar correctly and adhered to the IP guidelines regarding the composition of the written report.

The balance between the sections of most projects was generally good. Candidates are reminded of the expectation that the Introduction and Discussion sections be balanced in both content and length.
Some candidates would have benefited from making more extensive connections with the secondary resources in the discussion of primary data.

Only sources included in-text need to be in the reference list (titled References, not Bibliography). At times these in-text references did not align with the reference list. References need to be under appropriate subheadings for type of source used and the personal investigation also needs to be included as a source.

There needs to be a level of consideration given to what sources are more valuable. Candidates should use reliable sources, and psychological sources rather than referencing to general or google dictionary items, blog articles and other non-reviewed internet sources. There were many theories that were linked to blogs and opinion pieces which lack peer review.

Candidates should prioritise their graphs in order of most relevant. Unfortunately many candidates were providing raw data in their graphs. As such, candidates should be encouraged to have their graphs using percentages/averages as much as possible, especially when there is an imbalance between groups. Graphs should start at zero, otherwise small differences are magnified and this distorts how the data is perceived. Pie charts are not necessarily the most appropriate form of data presentation to use.

The word count (800 – 1200 words) was underutilised with a number of IPs being borderline 800 to 1000 words, when the topic chosen would have allowed a much more comprehensive and detailed exploration of the psychological issues concerned.