

## Psychology

Course Code: BHP315116

2016 examination of BHP315116 was of a new syllabus, criteria and standards which demanded a change of emphasis to assessment within this subject. The report for the 2016 examination will provide feedback for candidates about performance on this exam in relation to examiners' expectations of material covered and criteria addressed. For future candidates it is recommended that this report for external assessment is read in conjunction with previous syllabus reports and examination papers of 2008 – 2015, available on the TASC website.

### General Comments

In all sections of the examination, candidates scoring in the top range demonstrate:

- careful preparation and attention to detail
- demonstrate a well-informed and considered understanding of each section of the syllabus
- directly address and fully answer the questions asked
- demonstrate a thorough knowledge of related concepts and / perspectives and everyday examples to explain their understanding and application of theory
- construct a considered argument able to analyse and evaluate stimulus materials, relevant human research as well as classic studies
- respond to the specific criteria and relevant standards.

Candidates are expected to give definitions of the psychological meanings of concepts rather than definitions from a general dictionary.

Candidates answered questions using Part a and Part b structure of the question, essays and combined longer responses

Handwriting was sometimes difficult to read.

### Section A – Individual Differences

- Stronger candidates discussed the specific ways evidence supported particular theories and fitted within the nature/nurture debate

#### Question 1 – Gender

Candidates appeared to be well-prepared for this section of the examination.

The question clearly directed candidates to refer to the stimulus material in their answers, and nearly all candidates did so. Both stimulus items were accessible and candidates were able to write about them in detail.

Most candidates were able to provide a strong level of relevant psychological information in their answers to show the understanding of core elements in respect of gender.

It is important for teachers to include and candidates to understand both intersex conditions and the theoretical perspectives of gender, particularly with the new marking criteria.

### Criterion 1- Analyse theories about individual differences

- A pleasing number of candidates were able to argue a well-reasoned and coherent point of view on the factors influencing gender-related differences.
- Some answers presented only general descriptions of relevant theories, while stronger answers gave accurate definitions of relevant terms and concepts and theories and presented a wide range of research evidence to support their points.
- Some candidates gave inaccurate definitions of 'gender identity'.
- Most competent answers discussed stereotypes and then explained that when tested most of these stereotypes were not demonstrated empirically and that the few differences that are demonstrated are smaller than we expect and that the difference between men and women is less than between women and between men.
- Many candidates described the theoretical perspectives well, but stronger answers tended to go on to demonstrate the strengths and weaknesses of these theories by using evidence.
- Many candidates understood intersex and intersex conditions, but did not go on to explain how they contributed to an understanding of gender.

### Criterion 7 - Use evidence to support a psychological point of view

- Most candidates were able to use information from the stimulus material effectively. Stronger answers gave a clear analysis of the stimulus material, identifying and defining relevant concepts and linking the material to other evidence and theoretical perspectives rather than merely a re-statement of the stimulus material without explanation of content.
- Only a small number of candidates were able to provide accurate evidence related to intersex conditions apart from the information in Stimulus 1 and candidates did not seem to understand AIS and CAIS.
- A number of stronger candidates were able to discuss Stimulus 2 in relation to other research on mathematical and spatial abilities while weaker answers made general remarks unsupported by psychological evidence.
- A number of candidates incorrectly identified David Reimer as intersex, and described animal experiments at length; while these can be relevant such as the female rats being injected with testosterone behaving in a more male like manner, they should not be a major focus for evidence.

### Question 2 – Intelligence

Overall the intelligence section was done well.

Candidates generally showed a depth of knowledge of theories and could apply a range of evidence to support their analysis.

Candidates are reminded all parts of the question and sub points need to be addressed.

Heredity and heritability are not the same.

### Criterion 1- Analyse theories about individual differences

- Stronger answer used evidence from both stimuli to analyse and evaluated Sternberg's triarchic theory and Spearman's two factor theory. Most also included an analysis and evaluation of Gardner's multiple intelligences theory. Evaluation included the strengths and limitations of each theory and some comment on the interrelationship between the theories and how they extend on or compare with each other. Spearman's 'g' factor was also linked to the measurement of IQ.
- In stronger answers, all key concepts were covered in some detail and related to the stimuli and/or other evidence to provide explanation. Heritability was sometimes exchanged for 'inheritance' or 'genetics' rather than its more accurate meaning. 'Intelligence' was related to the definitions and theories, as was 'Spearman's 'g' factor.'
- Research examples were mentioned well, with animal research referred to only in otherwise weaker answers, and then with little to no reference to the question or stimulus material.
- Long winded re-telling of research (such as Genie) resulted in a weaker standard of response.

### Criterion 7 - Use evidence to support a psychological point of view

- There was a pleasing range of evidence presented for stronger responses, usually categorised as supporting the genetic, environmental (deprived or enriched) or interactionist perspectives.
- Stronger responses use the stimuli convincingly analysing the theories and explaining how the theories influence individual differences.
- Some responses presented antiquated evidence of a couple of studies (e.g. Genie and rat studies) at the expense of including a wider range of more recent and relevant HUMAN evidence.
- More typically candidates learn that the theories relate to what intelligence (definitions) is and how it can be measured. This led some candidates to answer very literally and try to relate evidence of environmental and genetic differences to the theories but not to the more recognisable argument about forces influencing intelligence, that is, towards the position of interactionism. This approach presented limited scope of addressing theories only for part a) of question.

### Question 3 – Personality

Generally the question was quite well responded to, with most candidates attempting to incorporate parts a) and b) as an essay answer.

Candidates are reminded that it is never a good idea to simply reproduce a pre-prepared essay in an exam.

The actual question needs to be addressed and both stimuli referred to throughout.

### Criterion 1- Analyse theories about individual differences

- Stronger responses included a wide range of factors influencing Personality, thereby accurately addressing the question whilst also integrating the environmental / hereditary / interactionist perspectives throughout. Such responses also argued a well-reasoned and coherent point of view with paragraphs connecting and flowing logically.
- Stronger responses defined, explained and applied to the stimuli all three of the concepts asked for. Accurate answers differentiated between the concepts of heritability and hereditary.
- Candidates who were able to critically evaluate the strengths and weaknesses/limitations of perspectives were rewarded.

### Criterion 7- Use evidence to support a psychological point of view

- Stronger answers made explicit reference to stimulus 2 by actually interpreting the data in Table 1 and then using it to support their argument about the genetic and environmental influences on traits as demonstrated by comparisons of correlations from twin studies.
- Stronger answers included a wide range of empirical and other evidence, **as well as** both stimulus pieces.
- Links between the empirical evidence and Personality concepts / theories were explained fully and clearly in the strongest responses.

## Section B – Psychological Processes

### Question 4 – Visual Perception

Many strong responses displayed good knowledge and detailed understanding of the key features of the question: process of perception; Bottom-Up and Top-down processing; role of gestalt principles: how perception of visual illusions occur.

Candidates used both stimulus items fairly well, although more often than not, Stimulus two was used in a descriptive rather than analytical way due to its 'definitional' nature. Displaying strong knowledge is important, but it needs to be directed by the question itself.

More successful responses included a detailed description and analysis of bottom-up and top-down processing, often raising Neisser's synthesis model; a description of Gestalt principles and an explanation of the role of these

principles; and described how visual illusions occur. This was also supplemented by a clear understanding of the processes of perception.

### **Criterion 2 - Analyse perspectives about psychobiological processes**

- Stronger responses were able to adequately explain the process of perception from reception through to interpretation in detail (as it was a key feature of the question) without making it feel like there was an overemphasis on sensation.
- Most candidates were able to define and list the elements of Gestalt principles and relate to both the concept of organization/bottom up processing and Stimulus 1, although weaker responses over used the stimulus and confused Gestalt with a top-down processing.
- The bottom –up and top-down processes were explained well by most. Stronger answers incorporated Neisser and sound examples from perception and aspects relating to illusions.
- Most responses commenced with a brief description of perception. The more successful responses elaborated on this description to explain the processes of perception. It was particularly important for candidates to highlight organisation and interpretation as this would enhance their later discussions of processing and Gestalt.
- Stronger responses defined the Gestalt principles and linked these to the organisation concept from the process of perception and bottom-up data driven processing.
- Many responses involved a description of bottom-up and top-down processing, however, linking the theories of processing to the organisation and interpretation of concepts of perception and illusions created a more successful answer.

### **Criterion 7 - Use evidence to support a psychological point of view**

- Linking the research to the stimulus was important, but it was also important to then link this evidence to the question being asked. The ability to do this highlighted the effective use of the stimulus materials instead of cursory mentions.
- Stronger responses used the information provided in the Stimulus 2 material as the starting point for discussion regarding the qualities of BU and TD processing.
- Stronger responses were able to use at least two or more studies to make sound links to the stimulus and/or question; making the evidence relevant and supportive to points made. It was a concern many students did not use any research at all in their work and relied heavily upon the stimulus material only.
- Using real life examples to explain and describe different Gestalt principles was very beneficial.

### **Question 5 – Consciousness**

The majority of candidates answered both parts of the question in an essay response. However, stronger candidates were able to incorporate the sleep theories asked for in part b throughout the essay rather than just 'dumping' them at the end.

### **Criterion 2 - Analyse perspectives about psychobiological processes**

- As this criterion specifies reference to psychological perspectives, the discussion of two theories of sleep was a requirement. A surprising number of candidates did not mention the restoration and survival theories of sleep, despite being directed to do so in part b as well as Stimulus 2.
- Candidates who explained the different characteristics of NWC and ASC and used a wide range of concepts such as sleep spindles or REM rebound were rewarded. The different aspects such as; levels of awareness, attention, memory, content limitations, control and some reference to selective attention and controlled/automatic processes with relevant research (Neisser & Becklen) were stronger responses.
- Strong candidates were able to effectively define and apply the sleep theories to the stimuli and then offered other explanations as to the purpose of sleep.
- Critical evaluation took a number of forms such as making a global judgement about the validity of a theory, pointing out positive features and shortcomings, providing supporting evidence or discussing where each theory might be applicable.

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### **Criterion 7 - Use evidence to support a psychological point of view**

- Stronger responses summarised the information depicted in Figure 5 and accurately interpreted the data contained within.
- Candidates were rewarded for then applying the brain wave patterns shown in the graph to each NREM and REM sleep stage and comparing to NWC.
- Effective answers explained the links between empirical evidence and consciousness concepts and theories.
- Stronger responses included actual empirical research evidence for the sleep stages, rather than merely relying on text authors such as Grivas or Plotnik.
- Stronger responses were able to draw conclusions from the point of view presented and did not rely solely on the stimulus material as evidence.
- The evolutionary aspects were easy to describe but there was a need to go beyond the animal scenarios and look at the studies that showed there was a sleep wake cycle even when there was no danger and even no awareness of night and day eg arctic / cave study.
- Best responses contained varied and specific evidence to support the discussions. This included names and dates of primary research studies, quotations from secondary sources, real-life examples and use of stimulus items.

## **Section C – Remembering**

### **Question 6 – Memory**

Question was accessible to candidates at all standards, and was well answered by many. Answers often addressed the question specifically, analysed two or more theories, and related concepts to both stimuli and other evidence.

### **Criterion 4 - Analyse theories about remembering**

- A range of concepts were used - both those used in part B some from the stimulus (eg attention) and others that were relevant.
- Responses were often structured to clearly identify relevant theories. Most analysed 2 theories, as they were asked in the Question, many added additional theory/theories. Typically the theories cited were Atkinson and Shiffrin, Craik and Lockhart, Baddeley and Hitch. Some candidates analysed semantic network (part b) as a theory, whereas others used it as evidence in relation to other theories or concepts.
- Some candidates spent too much time on one theory (often multi-store model), at the expense of analysing others.
- Weaker responses tended to describe rather than analyse.
- Some candidates included diagrams, which worked well when an explanation was included.

### **Criterion 7 - Use evidence to support a psychological point of view**

- The stimuli were usually clearly identified and placed well in responses to demonstrate understanding.
- Candidates engaged with both stimuli, and there was often an even balance in use of Stimulus 1 and Stimulus 2. These were linked to other concepts, research and theories, such as linking stimulus 2 to the cocktail party effect.
- Stronger responses used evidence to support theories.
- Stronger responses explained declarative memory in relation to long-term memory, weaker responses sometimes did not demonstrate any understanding of declarative memory
- Semantic network theory was described in weaker responses, whereas stronger responses explained and evaluated this, and linked it to other evidence.

## Question 7– Forgetting

This Question was problematic to a number of candidates as there was a heavy emphasis on organic aspects of forgetting in the concepts required, especially memory decline in ageing.

Some candidates struggled with the notion of "analysing and evaluating" organic explanations for forgetting. However, there was a full range of answers, some exceptional and some very weak.

Most candidates appeared to be well prepared for the non-organic theories of forgetting, although there was confusion over exactly which theories were "organic".

A significant number of candidates included quite detailed information about Mnemonic techniques in their answers, appearing to have been expecting to discuss this in their answer.

## Criterion 4 - Analyse theories about remembering

- Most responses discussed 1 or more theory of forgetting and made direct links to both the stimuli. Weaker responses provided little actual psychological information about forgetting- generalised, personal "waffle" and/or insufficient information relevant to the topic. Some only covered decay and motivated forgetting to the exclusion of other non-organic theories, such as interference, retrieval cue failure (state and context dependent forgetting).
- Defining "retention" was problematic to many, although better answers were able to connect this with recall and recognition as measures of retention in stimulus 1.
- Stronger responses included an extended range of theories (supported by sound empirical evidence) as well as discussing strengths and weaknesses (evaluation) of the various explanations for forgetting. Some seemed to spread their answer a little thin by explaining all theories instead of addressing 3 or 4 in depth.
- A number of responses included considerable information about models of memory and processes such as consolidation, serial position effect. Where this was used to relate to forgetting it was rewarded.

## Criterion 7 - Use evidence to support a psychological point of view

- Stronger responses explained the stimuli and related these to 1 or more theories of forgetting, such as decay/displacement, interference, rather than merely re-telling the stimulus pieces in a very generalised manner. These responses also accurately distinguished between organic and non-organic explanations for forgetting, including extensive use of empirical research to support their discussion of a range of theories.
- Weaker responses tended to merely re-write the stimulus piece, especially stimulus 2.
- Some took a health perspective about stimulus 2, rather than a psychological approach.
- A few candidates provided an impressive range of psychological research relating to AZ, KS, HM, amnesia and the effects of ageing, which was rewarded. These answers also included an extensive range of non-organic causes of forgetting with associated research studies.
- Weaker responses were very brief, referred to only 1-2 theories and included very little, if any, empirical research studies.

## Investigation project: Human Learning

Learning appears to be the more difficult of the four Investigation Project topics but overall candidates produced IPs of a pleasing standard considering the level of difficulty of the topic.

There were some excellent and original ideas in many reports as well as some thorough secondary research that applied directly to the area of primary research.

The majority of candidate contributions followed guidelines, expectations and on the whole researched topics that fitted the Learning module. However, some candidates did not set up their investigation with relevant information, use any references or significant empirical evidence in the Introduction at all (no studies cited) just all their ideas. Some Introductions were simply not long enough to explain the background of the topic or the study and some strong Introductions were not always supported by strong analysis and discussion.

Important information was often placed in the Appendices when it should have been included in the main report. Ethical concerns are still occurring and candidate names, school / colleges are still appearing on Investigation Projects, particularly in the appendices.

### **Criterion 3 - Analyse theories about human learning**

- Overall there was a good range of topics chosen and candidates showed a thorough understanding of characteristics and demonstrated they could apply concepts to real life examples of Human Learning.
- Candidates generally used correctly a range of relevant terms and concepts supported by a range of evidence and examples from research into human learning. Stronger responses went beyond the standard studies, and there was evidence of wide and deep reading. Many candidates made a good attempt at analysing and discussing their research findings and drawing appropriate inferences from primary data. Stronger responses provided clear linkages to other research evidence and theoretical perspectives.
- Candidates are reminded that if choosing to investigate a variable such as sleep or memory with a learning topic, then the emphasis of the report must be on the Learning theory / concepts. There were a few instances where topics other than learning formed the majority of the report and candidates were assessed accordingly.
- Some candidates did not fully demonstrate learning but rather achievement on a single task. Whilst there was a reasonable link to motivation and reinforcement, it would have been good to see these applied more specifically to learning.
- In some reports much of the information in the Introduction did not align fully with the topic researched in the primary study. For instance, some candidates discussed Pavlov and Skinner at length in their Introduction and then went on to do an experiment on observational learning, which had not been discussed.
- Application to real life was not always evident or explained well; for example Classical and operant conditioning were sometimes explained incorrectly.
- Quite a few reports that examined learning sets, were very light on in terms of theoretical background. This may be because there is not a great deal of it, but it is something to be aware of when choosing your topic.

### **Criterion 6 - Use ethical psychological research methods**

This criterion was generally well addressed by candidates and demonstrated a satisfactory understanding of research methodology. Stronger candidates drew a clear link from their Introduction to their Research design. Research that was set out in a structured format (eg use of headings, clearly identifying IV / DV) were better at making it clear how their research was conducted. Candidates who did not make use of structure were at risk of missing key elements (eg IV / DV and ethical considerations). Although candidates only need an Aim and/or Hypothesis it is relatively hard to identify the IV/DV without an hypothesis.

**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.**

It is important to demonstrate how ethical considerations were addressed when conducting research. Candidates need to clearly explain ethics and justify their design in this section. Many candidates included their ethics statement as an Appendix as evidence of an informed consent form and briefing/debriefing as a disclaimer. Weaker responses tended to list general ethical considerations or did not address ethics.

Candidates need to be more explicit with the ethical considerations underlying psychological research. Specifically:

- Voluntary participation: Potential participants must be specifically asked if they consent to participate. If the potential participant does not give consent, then that potential participant must not participate in the research.
- The researcher must not make statements to the potential participants that may be seen as coercive, such as: 'I need you to be one of my participants' or 'It will really help me out if you participate'.
- For child participants in the research, a parent or guardian must give permission for the children to participate as well as the child consenting to participate. Candidates who choose to use children as participants for research are reminded to be very clear regarding the process used and parental consent.
- Informed consent is telling participants before the experiment what they will be doing and unless deception is required, the purpose of the experiment.

- Deception should be minor, but an experiment should not be dangerous or lead to foreseeable danger. It should in no way cause pain, harm, discomfort or humiliation.
- Breached confidentiality occurs by printing names of participants, where they were from and naming themselves and schools / colleges in any part of their report and in particular, candidates need to carefully go through their reports and appendices to ensure that this is not done.

Overall many candidates set out a well thought out procedure and their steps were detailed and well written. With there being no specified word limit for Research Design and Methodology, the Method section does need to be the concise nature of a replicable experiment. Process or procedure needs to be clearly stated and is probably most easily done in point form. Some candidates had difficulty with this ie. they were confused with their own process and had different steps in the procedure.

Candidates should indicate the number of participants and how they were accessed. Terms need to be used correctly. E.g. random selection, validity, reliability, significant. There was an issues with small participant numbers, particularly when these were divided into a number of control and experimental groups.

Frequently IP reports had raw data in the Results section when this section should be to represent data in a simplistic and descriptive manner ie averages, percentages etc. Raw data belongs in the Appendices and only if referred to in the body of the report.

Having one or two graphs for the IP is sufficient in the majority of cases as this is a simple experimental design. Graphs need to be explained by the candidates – it is not the role of the examiner to interpret the information, only to check if the candidate's interpretation is correct. Many candidates recorded their findings on a line graph when a bar chart or a table would have been more appropriate.

Candidates should identify briefly any limitations of their research as part of their analysis and discussion.

### **Criterion 8 - Communicate psychological ideas, information, opinions, arguments and conclusions.**

It was pleasing to find the majority of candidates followed the IP guidelines regarding the composition of the written report. Most candidates adhered to the word count, and presented their report in an appropriate, objective, third person writing style, used grammar correctly, with a balance between the sections of the report.

The vast majority were a good length using the maximum 1200 words. A small number of reports fell very far short of the required minimum word limit and were assessed accordingly.

- Candidates are reminded of the expectation that the Introduction and Discussion sections be balanced in both content and length. Some candidates wrote lengthy and well informed Introductions but then wrote limited Discussions – some made no attempt at all to link findings back to prior research.
- The depth of psychological evidences articulated within the Introduction and Discussion sections differentiated sophisticated and complex contributions from those which simply summarised their topic with little application of relevant and supporting empirical research. Discussion should include reference to the introduction and the hypothesis. References should be used.
- Whilst stronger projects reflected research which provided clear evidence on a topic from a range of sources, not just online references, many Discussion sections focussed too heavily on the explanation of problems and means of improving research limitations at the expense of data analysis and evaluation. Weaker candidates chose research ideas which proved either too difficult to adequately research or lacked sufficient depth of psychological interpretation, provided insufficient resources, poor in-text referencing and insufficient depth of coverage re word limits.
- The level of analysis and evaluation of data was variable. Candidates should be discouraged from simply graphing all research trends with no discussion of how these relate to their research hypothesis. Some candidates presented graphs showing raw data and failed to provide a statement beneath the graph. There were, however, some candidates who stated results beneath their graph and then repeated this same information in a summary of main trends. It needs to be one or the other. Pie graphs are rarely relevant for Psychology and should be avoided. Many candidates were confused about the difference between amount and number; if it can be counted, use number.



- The majority of candidates included at least 3 different types of sources and stayed within the required word limit of 800-1200 words.
- Referencing using an established system is essential to this style of report, and candidates who focus on doing this well can do well on this criteria. Footnotes are not to be used in the report. Candidates should use a psychology dictionary to obtain definitions rather than a standard dictionary, as correct definitions are specific to the discipline of psychology.
- Candidates are reminded that only sources included in-text need to be in the reference list (titled References, not Bibliography).
- References should be under appropriate subheadings for type of source used and the personal investigation also needs to be included.
- Web addresses need to be included on the Reference page; the examiner may need to access the material quoted by the candidate.
- Stronger candidates drew from a range of sources, and had sought out sources that supported their research. Most references used were of relevance to the chosen topic. Weaker candidates struggled to master referencing systems, and in-text citations not matching their reference list. However, all candidates are reminded NOT to use potentially unreliable websites such as Wikipedia and personal blogs. Journal articles were well used in stronger reports.