As in previous years, the 2014 examination report provides feedback for candidates about performance on this examination and indications for how future candidates may improve performance in relation to examiners’ expectations of material covered and criteria addressed. It is recommended that this report for external assessment is read in conjunction with previous reports of 2008 – 2013, available on the TQA website at http://www.tqa.tas.gov.au/1119

WRITTEN EXAMINATION

Candidates are advised to read all previous reports carefully, and to utilise advice and direction given.

Stronger responses demonstrated careful preparation and attention to detail, made effective use of stimulus material, answered the question, and gave balanced attention to each criterion. These responses directly addressed the questions by actively engaging the stimulus materials; using relevant human research as well as classic studies; demonstrating a thorough knowledge of related concepts and everyday examples to explain their understanding and application of the theory.

Weaker responses tended to be shorter in length, thereby compromising balanced or adequate attention to the two criteria being addressed. Often the question was not fully answered, presenting information rather than using it to interpret, apply, analyse and evaluate information effectively.

Some ‘formula’ responses often seemed to lack depth of understanding in relating evidence and examples to the key concepts in the question but these still often managed to address the set question. Some candidates used the full referencing details each time the stimulus was discussed rather than referring to stimulus 1 and stimulus 2 for example. There were quite a few candidates who claimed that various examples of research proved …; this is to be avoided and replaced with words such as ‘demonstrate’.

Question 1

Criterion 3

Many responses presented a thorough well integrated and detailed discussion showing understanding of key concepts, research and relevant theories. Most referred directly to both stimuli and used the concepts to explain the information in each, often linking this to appropriate theoretical perspectives, such as social learning, cognitive developmental, gender schema theories. Stronger responses supplemented this with additional specific research studies, such as Condry and Condry’s “Baby X” experiments, case studies such as D.Reimer (Money, Diamond) and so forth.

Weaker responses were very generalized, using, but not explaining the key concepts, and showing a lack of specific research studies or knowledge of theoretical perspectives: in short a very brief part (b) answer. Some went into lengthy descriptive details about a specific research study without drawing any
clear conclusions about its relevance or perspective, highlighting confusion about what the study actual showed. Some referred only to the research included in the 2 stimuli. A number of candidates were using generalized quotes from texts by authors such as Woods, as if they were research studies or cited no empirical evidence in their responses.

Criterion 5

Most candidates could confidently define, explain and apply the concepts in part (a). Defining “genetic endowment” was challenging to a number of candidates, as it was not an expected concept, however most were able to link it to heredity, genetic or biological factors, as well as to stimuli 2. Some candidates made only very brief links to the stimuli and did not precisely define or ignored the listed concepts altogether. Most candidates were able to include some discussion about differing theoretical perspectives related to gender difference, with a nature/nurture theme. Some covered 1-2 differing explanations in considerable detail; others covered many theories, but only briefly.

It was interesting to note that a significant number of candidates seemed very well prepared to analyse and evaluate a wide range of theories about gender differences even though this was not an assessed criterion in this section this year.

Some candidates spent too much time quoting large sections of the stimuli.

Question 2

Criterion 3

On the whole, candidates performed well on this question. Most candidates had evidence to cover both sides of the Nature/Nurture argument. Candidates were able to demonstrate an understanding of how intellectual differences develop, although few used the wording of the set question.

Evidence to support the heredity argument such as twin studies and adoption studies was provided and a good understanding of these was demonstrated. Some candidates relied on rat studies to the detriment of human evidence.

Meaningful use of the stimulus was an area that was lacking. It is important to note that graphs should be studied carefully as the mean correlations provided in Stimulus 1 were slightly different to those learnt by most candidates for Bouchard and McGue’s research. Not all candidates were aware of this, therefore ignored the specifics of the stimulus and the question, launching into a discussion of this more well-known study. This indicated candidates failing to actually read the graph and look carefully at the data. Most candidates ignored data past column C on the graph, which was unfortunate as the graph provided links to adoption studies and provided some good discussion points.

Stimulus 2 was used well as a springboard into the concepts of Enrichment and Deprivation.

Additional environment enrichment and deprivation studies were included as well as the interactionist perspective with relevant examples, notably Scarr’s reaction range evidence.
Criterion 5

On the whole most candidates were able to demonstrate a good understanding of the 3 concepts provided although genetic endowment proved to be challenging for some. It was common for candidates to refer to “genetics” or “heredity”, rather than using the fuller term, genetic endowment and many failed to make the connection to the biological argument. Actual, accurate definitions were rare for this concept, but may reflect the lack of reference to this term in the literature.

Stronger responses were those where candidates defined the concepts, linked these concepts to the stimulus when possible and then added further research. Such responses could evaluate intellectual potential with genetic endowment and the relative contribution of heredity and environmental influences, especially using Scarr’s reaction range theory and Stern’s “rubber band” hypothesis. Insightful candidates could integrate concept of enrichment with reaction range and subsequently explore intellectual potential, using either or both stimuli. Stronger responses for enrichment defined the term before discussing enrichment programs.

Few candidates integrated discussion of the relative importance of heredity and environment, and the mention of heritability was a pleasing addition to responses. More articulate responses may have included reference to the Flynn Effect, the cumulative deficit hypothesis, prenatal sensitive developmental periods and cultural bias with race studies.

Question 3

Criterion 3

There were a small number of responses to this question; some were excellent. Most candidates had evidence to cover both sides of the Nature/Nurture argument. Candidates were able to demonstrate an understanding of how personality differences develop.

Stronger responses defined key terms, with reference to the stimuli and appropriate concepts such as heredity (heritability), shared and non-shared environments and explained a variety of trait/type theories of personality. These were supported with extensive evidence (research studies such as Bouchard’s family resemblance studies and theories of personality, such as Cattell’s source traits and McCrae and Costa’s Big Five Model) relevant to the role of genetic and environmental factors and their interaction. They also included some comparisons between the different perspectives.

Weaker responses paid little attention to the stimuli, frequently merely re-writing or describing them, rather than providing any explanation of what they represented or the perspectives to which they related.

Criterion 5

Stronger responses provided clear accurate explanations of the concepts in the question, such as personality and personality traits, including a variety of theories of personality and self (incorporating parts (a) and (b)). Stronger candidates were well prepared to discuss a range of theoretical approaches to personality and its development, supporting these with relevant research and evaluating each in relation to genetic and environmental factors.
Weaker responses were relatively brief, generalized and subjective, demonstrating little actual understanding of specific concepts, research, theories, or perspectives about the influences on personality.

**Question 4**

This question provided an opportunity for most candidates to demonstrate their knowledge while at the same time challenged the more able candidates.

Stronger responses answered the question, and continually referred to both criteria and the questions asked, integrating information successfully and applying their knowledge to the stimuli in some detail.

Nearly all candidates correctly identified related concepts of classical conditioning to stimulus 1 and operant conditioning to stimulus 2.

**Criterion 3**

Stronger responses used everyday examples of applications of conditioning concepts, applied this information to the stimuli and used it to effectively explain the concept/s; even stronger responses linked this to the findings of evidences.

Weaker responses relied on the classic animal based experiments with little attempt to explain their connection to human learning. However, knowledge of these was often comprehensive and well understood. As the question clearly asked for evidence of how humans learn, candidates were expected to answer using examples of human learning.

For examples of classical conditioning and operant conditioning in humans, candidates could have referred to examples from Grivas, Down & Carter, (2004), Ch. 12

It is important to adequately convey the process of CC and OC with terms such as UCS/CS and UCR/CR explained in relation to humans and stimulus material. Some responses did not refer to these and used very general descriptions.

Some candidates totally disregarded the stimulus on systematic desensitisation due to lack of understanding. Stronger responses explained the process using key terms of CC and then linked it to flooding and graduated exposure, with relevant researchers.

**Criterion 4**

Stronger responses critically and effectively analysed the stimuli using a range of related concepts in Conditioning, and assessed the quality and validity of the evidences they discussed. Most candidates identified Conditioning as a learning process which can be observed in everyday life, with stronger responses explaining the weaknesses (eg. role of cognition) and strengths (eg. CC as an explanation of involuntary learning) of the theories.
Some provided a good analysis of the similarities and differences between CC and OC, with stronger responses identifying the implications of these (eg. Two Factor learning). Stronger responses related Token Economies to types of, and schedules of, reinforcement and shaping.

Weaker responses attempted a brief analysis.

A reminder to candidates that it is not sufficient to simply rewrite the stimulus or refer to it in a cursory manner (ie ‘see stimulus’). This does not show understanding of the material.

**Question 5**

There were some very good responses which demonstrated that candidates had prepared very carefully for this question. Good range of evidence was provided by most candidates. There was a tendency to give way too much detail re Bandura experiment and neglect making the link to concepts that the evidence supported.

**Criterion 3**

Generally criterion 3 was well addressed by candidates who were able to provide evidence of Bandura’s Bo Bo doll experiment, outline the processes and link to the stimuli in a sustained argument. Some candidates confined their discussion to Observational Learning. Given the wording of the question, other social cognitive learning theories were also required. Many candidates discussed Insight, Cognitive maps, Latent and or Learning Set/Transfer.

Stronger responses discussed human examples of social cognitive learning and some exceptional responses provided a great deal of detail. Vicarious conditioning was handled well.

Weaker responses ignored aspects of the question which asked for any explanation of the processes involved in observational and social cognitive learning so answers were relatively short as a consequence. Whilst these responses sometimes mentioned the forms of learning, processes were often not discussed.

**Criterion 4**

A number of responses were constrained by reference to Observational Learning only. Cognitive theories and processes needed to be addressed more directly. Candidates often did not make it clear that they understood processes of attention, retention, etc, latent learning, insight learning and its elements were/used cognitive processes. Differentiating between behaviourist and cognitive theories would be helpful to show understanding.

Stronger responses provided a definition of cognitive learning, attempted to evaluate the theories and processes, and provided animal and human studies. Reference to both stimuli provided a good start point for stronger responses.

Important role of models was well understood but often not followed up with any evaluation.
Weaker responses provided a description of each learning type without any analysis and human evidence.

**Question 6**

**Criterion 4**

Candidates found this criterion a challenge. Many fell short in the analysis area; in particular analysis of the stimulus pieces. Candidates should be reminded to link to the stimulus pieces where appropriate and analyse and evaluate with reference to theories and psychological concepts. The vast majority of candidates did attempt to compare and evaluate at least two different theories of memory, so criterion 4 was well-attempted in this regard.

Stronger responses were able to link both stimuli to the concepts and models of memory and were able to draw a conclusion outlining each explanation of storing information in memory has strengths and weaknesses. Research findings were beneficial to help outline the strengths and weaknesses of each model of memory. It is important for candidates to use evidence to support a point of view in order to provide a sound justification of an idea.

Many candidates chose to discuss Atkinson & Shiffrin (1968) Multi-Store Model, however, they did not analyse or evaluate it. For example, candidates would draw the diagram or outline the main terms without explaining them.

There was a tendency to repeat portions of Stimulus 1 rather than actually analyse /discuss it.

Only a very small minority used the Control Group in Stimulus 2 to discuss the serial position effect.

Stimulus 2, a rich stimulus, was much underutilized, and many of the responses linked Stimulus 2 with Levels of Processing Theory but not a mnemonic device.

**Criterion 5**

Most candidates were able to discuss the common psychological concepts and ideas related to memory. Many were able to discuss encoding, storing and retrieval. Most responses demonstrated at least a satisfactory basic understanding of the processes of memory and of the different models of memory, often combining parts (a) and (b) into one essay, and included the specified concepts (encoding, elaboration, mnemonic devices).

Stronger responses were able to link a broad range of psychological concepts and ideas to the question (for example, chunking, self referencing, serial position effect, and mnemonic devices such as the method of loci, pegword method, etc).

Weaker responses were generally short on definitions – a lot of skinned-over, rote summaries describing the models without defining terms/concepts or providing examples from real life or research.
Some misconceptions about content seemed prevalent:

- Confusion about encoding only occurring in LTM
- Misconception about sensory memory being only iconic and echoic
- Misconception about LOP being only ‘shallow’ or ‘deep’, and of LOP being the only memory theory supporting elaboration

**Question 7**

A range of explanations from the syllabus document on Forgetting were presented, as well as other explanations like Consolidation theory or Displacement theory. Many responses presented State and Context dependent forgetting, and Tip of the Tongue Phenomenon as stand-alone explanations rather than linking these to Retrieval Failure theory. Responses for the analysis component of the criteria were generally sound, accompanied by varying degrees of detail.

**Criterion 4**

Analysis and evaluation of relevant theories needs to be overt. Stronger responses contained evaluations of the explanations, giving detailed analyses and evaluations of three or possibly four explanations, whereas weaker responses dealt with numerous explanations in superficial detail.

Stronger responses offered detailed and often multiple possible interpretations of both pieces of stimulus material. Many candidates were able to make meaningful evaluations of the graph by referring to specific details of similar research with which they were obviously quite familiar. Explanations ranged from general comments about the applications and circumstances of use, to strengths and weaknesses, or to the presentation of alternative theories or evidence which challenges these explanations. Some responses also made more global judgments about the relative merits of one explanation to others.

Weaker responses showed a less structured approach. The graph presented as Stimulus 1 challenged some candidates who appeared uncertain about what the ‘percentages’ actually represented. Responses that referred to the stimulus materials at various points throughout their responses received more credit than weaker responses that touched upon each piece only fleetingly. The excerpt presented as Stimulus 2 was generally addressed in a satisfactory manner, though the names of the two types of amnesia were frequently confused. Candidates are advised to read the details in the stimuli provided very carefully.

Some answers included long sections containing superfluous information such as techniques for improving memory.

**Criterion 5**

The title of Stimulus 1 suggested the most obvious explanation for the rugby players’ forgetfulness. Most candidates were able to competently explain Interference theory and why it affected the players. Stronger responses went further by also proposing other explanations, such as Decay or even Dementia Pugilistica, which is common in head-injured individuals! Some perceptive responses also linked the stimulus graph to the Forgetting Curve.
Regarding Stimulus 2, almost all candidates demonstrated some grasp of Amnesia. Stronger responses made suggestions as to the cause of Mr. G’s amnesia, with reference to both organic and psychological explanations.

Whilst most candidates were able to use psychological terminology in an accurate and consistent manner, there was considerable confusion over the difference between proactive and retroactive interference. Organisation of content was rather haphazard in some weaker responses. This was partly due to differential understandings of the terms ‘organic’ and ‘non-organic’ (theories of) forgetting. Some responses were simply too short to satisfactorily address the relevant theory or the intricacies of the stimulus material.

INVESTIGATION PROJECT

Candidates and teachers are referred to previous Assessment reports as comments were again very similar to past findings.

Overall the Investigation Projects were quite pleasing, covering a broad range of topics, from both areas of Perception and Consciousness. Most were of good quality, following the suggested format and meeting the word count limit. Whilst the guidelines are lengthy, they do provide extensive detail about what is required to achieve good quality reports. Candidates and teachers need to be familiar with and adhere to the guidelines for the Independent Project folio.

• Most candidates mentioned ethical considerations.
• A variety of methodologies were used, the most popular being experiment or survey.
• An experiment must clearly identify the DV and IV
• Quantitative data was predominately collected.
• Analysis requires some statistical interpretation of data; it is not appropriate to graph raw data or refer to, for example, 3 of 7 participants.
• Better studies again made genuine and valid attempts to explain the results, i.e. explain the reasons to account for why the results came out the way they did.
• Despite the guidelines stating the method and results sections were not to be included in the word count, some candidates appeared to be unaware of this and presented inflated word counts as a result. This may have accounted for lack of depth in discussion for those who thought they were closer to the 1200 word limit than was correct.
• Proofread the report and make corrections before it is submitted.
• In general, aspects that were well-followed were:
  • Staying within the word count
  • Using the correct general formatting (font, interval word counts, appendices)
  • Including in-text references in the appropriate places
  • Using three different types of sources

Criterion 1

In general project topics were reasonably diverse, with perceptual set/context, selective/ divided attention being popular choices for perception and aspects of sleep and dreaming for consciousness.
Better projects showed a high level of sophistication in the presentation of the report, including reference to a breadth of relevant secondary source material, detailed analysis of the collected data and use of appropriate psychological concepts and theoretical perspectives to explain findings.

- There was a tendency for many candidates to write a 400 word introduction which included secondary sources, but which were not referred to again in the Discussion. Instead the limitations of the research design took up most of the Discussion rather than any integration of primary and secondary findings.
- Some candidates had difficulty with the results, including presenting only raw data as results, not calculating means for each group tested to allow for comparisons between experimental and control groups, and presenting line graphs instead of bar graphs, making the results cumbersome and difficult to interpret.
- Most satisfied the word limit requirement, although some were only just around 800 words.
- A few Investigation Projects raised ethical issues especially around not stating what permissions had been obtained to test younger children (less than 14 years). Ethical considerations must be addressed; what ethical considerations were taken into account and how was this done needs to be explained.
- Some investigations were deemed to be inappropriate in terms of choice of topic- not psychological in focus, more health/ nutrition or not on the current topic for IP.
- Using a title gives the marker knowledge of what the investigation is about.
- Introductions should not be longer than the Discussion.
- Objective third person point of view should be used.
- Candidates need to ensure quotation marks are used for all direct quotations and need to provide the relevant page number.
- The aim or hypothesis should follow logically from the discussion in the introduction section.
- Methodology should not be included in the introduction.
- Methodology needs to be clearly outlined. This does not count in the word count so make it clear; explain what the procedures were and exactly what each group did.

This is not the place to discuss shortcomings of the personal research.

- If an experiment is carried out, it does not become a survey because participants provide answers to set questions. These terms should not be used interchangeably.
- There is no need to include a list of secondary sources in the Methodology.
- IV and DV need to be stated in experiments.
- Selection of participants need to be clearly stated; many candidates were confused as to how they chose their sampling group.
- The incorrect use of 'random' selection/ sample still occurred.
- A copy of the survey tool needs to be attached to the Appendices where appropriate. Some candidates referred to a document in the appendices only to fail to include it.
- Graphs/ tables in Results section need a brief descriptor underneath.
- Results need to be stated beneath graphs.
- Insufficient labelling of graphs.
- There is no need to include all 3 of mean, medium and mode unless there is a spread that could be useful.
- Some 3D graphs were unreadable.
- Some minimal analysis of results at least is required.
• Do not graph raw data.
• Summarizing the “key findings” in the analysis section was clearer where there were complicated results.
• Limitations should not be the focus of the Discussion and should be reasonably short.
• Poor in text referencing was common.
• A mismatch with in-text references and final reference list. Only references used and referred to in the report are to be included in the References list. All research studies cited need to have a reference source.
• Personal Investigations (primary research) need to be included in the Reference list.

Criterion 7

Most candidates were able to plan and conduct a well-designed and appropriate, small scale primary research study, collate their findings, analyse and discuss their results in terms of previous related research studies and other relevant psychological information. These projects were well rewarded.

• Appropriate methodologies for exploring the problem were generally used.
• Replication studies and those based around past research are appropriate methodologies.
• Matching design with hypothesis and independent and dependent variables is important.
• Candidates need to be reminded about IV, DV – if these are not present / identified it can actually alert you to issues with your IP.
• The DV needs to be explained clearly: what is being measured needs to be stated.
• Ethical guidelines followed must be stated and include an example of the form used in the appendix. Do not miss this out, there is space in the Methodology to write about it directly without compromising word count. A significant number of projects utilised younger children as their sample without apparently gaining ethical consent from parents or participants.
• Some candidates assured interviewees of confidentiality and proceeded to name the interviewee throughout the Investigation Project, or mention their own college /school by name thus compromising the stated ethics.
• Some candidates did not mention sampling method at all, while others claimed that their sample was ‘random’ when it was clear it was a convenience sample.
• A few Investigation Projects had very small samples, 4-6 participants only, which limited the validity of conclusions which could be drawn.
• Connections between primary and secondary sources need to be better articulated –some candidates did not analyse and evaluate their primary data with their secondary research. Link what has been stated in the introduction to the results when presenting the discussion. Ensure it makes sense and flows.
• Most candidates did include some limitations of personal research in the discussion, which was beneficial.
• The use of YouTube clips as a reference were often cited but some could not accessed by examiners. Ensure URLs are correctly cited.
• Materials used in the production of the primary research stimulus need to be identified but are not a separate source for secondary research information.
### Award Distribution

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