SACE Logo CoBrand Black grayscale

Psychology

2016 Chief Assessor’s Report

# Psychology

# 2016 Chief Assessor’s Report

## Overview

Chief Assessors’ reports give an overview of how students performed in their school and external assessments in relation to the learning requirements, assessment design criteria, and performance standards set out in the relevant subject outline. They provide information and advice regarding the assessment types, the application of the performance standards in school and external assessments, the quality of student performance, and any relevant statistical information.

## School Assessment

Assessment Type 1: Investigations Folio

The more successful responses

* had research questions/hypotheses that varied from others in the same assessment group
* included effective graphs that required no further information for interpretation
* correctly interpreted the standard deviation when it was calculated
* contained evaluations of procedures, rather than definitions of validity (external/internal) and reliability
* linked points in the discussion back to the research question
* provided comments on the rigour of the investigation
* provided sophisticated and relevant ideas, rather than superficially trying to cover all aspects of measurement and design (e.g. experimenter effects, measurement tools, external validity, and internal validity)
* did not include literature reviews with references
* discussed ethical issues specific to the research program

The less successful responses

* were overly scaffolded; e.g. sentence starters were provided, resulting in formulaic answers
* omitted, in the proposal, how the data were going to be used; this lack of detail resulted in reduced clarity and coherence
* included a method section, which is not needed and unnecessarily contributes to the word-count
* included raw data in the report
* contained too many or irrelevant graphs, e.g. boxplots, standard deviations
* contained repetition, rather that interpretation, of the data in the discussion
* included unnecessary subheadings, such as ‘Internal Validity’ and ‘Measurement Tools’
* discussed ethics generally across both tasks in the folio.

Assessment Type 2: Skills and Applications Tasks

The more successful responses

* were demonstrated when teachers provided assignments, as well as tests, particularly in the assessment of specific feature I2, the critical analysis of a range of sources
* demonstrated evidence of specific feature KU2 when an opportunity to complete a range of tasks was given within this assessment type
* were found in tasks that assessed only three or four specific features
* demonstrated a clear understanding of the lead-in verbs used in test questions.

The less successful responses

* discussed content outside the boundaries of the subject outline, specifically in the topics of Healthy Minds and Personality, e.g. autism, or intellectual disability
* went beyond 1000–1500 words to demonstrate evidence for three or four specific features.

General information

* Qualitative investigations were few in number. These are viable options for students who are articulate and less science-oriented.
* Most of the research programs available were represented among the students.
* Variations — Moderation Materials forms were often missing or, if included, omitted specific information about the student or the task that was missing.
* When preparing moderation materials, tasks need to be collated by assessment type for each student.
* Moderation packs should include the learning and assessment plan and a full set of assessment tasks.

## External Assessment

Assessment Type 3: Examination

The subject outline states that the external examination consists of short-answer and extended-response questions. For this assessment type, students provide evidence of their learning in relation to all four assessment design criteria:

* investigation
* analysis and evaluation
* application
* knowledge and understanding.

It was pleasing to see that many students demonstrated the ability to handle questions in relation to all these four criteria.

With a mean score of 62% for the examination, the overall standard of answers in 2016 was consistent with that of previous years.

**Section A: Short-answer Questions** (Questions 1 to 14)

General Comments on Section A

Many students exceeded the spaces provided in Booklets 1 and 2. If students continue their answers elsewhere, they should make a note to alert the marker. Other students wrote in the margins of the same page as the question, leading to difficulty in reading. Students were not penalised for spelling errors if words used were clearly understood.

It was also apparent that there is still a need for students to:

* read questions more carefully
* use appropriate psychological terms wherever possible
* pay attention to the key verbs used in the question and respond accordingly
* explain abbreviations, if used
* refer to the specific situation of the question, rather than provide generic answers.

*Question 1*

Students demonstrated a high level of understanding of the learning process in this question.

The more successful responses

* demonstrated knowledge of the correct psychological terms and appropriate application of them:  
  Example: In part (e), ‘Extinction had occurred. The conditioned response (CR) (sneezing/itchy eyes when exposed to red flowers) had disappeared because the unconditioned stimulus (UCS) — kangaroo grass — was no longer paired with the conditioned stimulus (CS) — red flowers.’

The less successful responses

* included the identification of the conditioning as ‘operant’, rather than ‘classical’, in part (a)
* were not specific enough   
  Examples:
  + unconditioned response (UCR): ‘hay fever’, rather than ‘sneezing/itchy eyes’
  + CS: ‘roses’ or ‘flowers’, rather than ‘red roses’ identified in the question
* demonstrated confusion between the UCS and CS
* included a random variety of learning terms, such as ‘extinction’, ‘spontaneous recovery’, or ‘classical/operant conditioning’, when the terms ‘stimulus generalisation’ and ‘discrimination’ were required
* identified extinction correctly in part (e), but did not effectively explain why it had occurred; justifications included references to red roses (CS) being absent rather than kangaroo grass.

*Question 2*

This question assessed one of the three key ideas in the Learning topic: ‘Some associations are easier to learn and maintain than others.’ While it was extremely rare for students to receive full marks (2 marks), many obtained 1 mark.

The more successful responses

* discussed preparedness, taste aversion, or the Garcia effect, demonstrating an understanding that oysters had never been a problem in the past, but that one bad experience resulted in very powerful learning.

The less successful responses

* made reference to classical conditioning, including a recognition that the oysters had become a CS
* only described the acquisition phase of the learning process
* explained the learning in terms of operant conditioning — the food poisoning was a punishment — but did not address why this one bad experience led to such powerful learning.

*Question 3*

Although this was one of the most common questions to be left blank, it was generally answered correctly when attempted.

The more successful responses

* identified positive reinforcement as the component of operant conditioning demonstrated by the boy, and correctly justified their answers  
  Example: ‘The mother’s attention (a positive reinforcer) increased the child’s undesired behaviour (pulling on the mother’s sleeve and attempting to interrupt).’

The less successful responses

* focused on operant conditioning from the mother’s perspective (negative reinforcement), which was not sought in the question (Note that students who answered part (a) incorrectly were still able to get credit for part (b), depending on their justifications.)
* explained the component of operant conditioning as negative punishment — the boy punished his mother for ignoring him — overlooking the fact that there was no reduction in behaviour
* indicated confusion in concepts, referring to ‘schedules of reinforcement’, with the most common being ‘continuous reinforcement’.

*Question 4*

The more successful responses

* correctly identified observational learning as the type of learning taking place in part (a), with variations in terminology, such as ‘modelling’ or ‘vicarious learning’
* applied the attention, retention, reproduction, and motivation (ARRM) model of observational learning to the scenario, the most common aspects discussed being attention, retention, and motivation
* correctly identified the scenario in part (b) as punishment or negative punishment
* included discussions about the non-renewal of contracts being the adverse/unpleasant stimulus that was removed in part (c), to strengthen/continue the behaviour of working hard to produce the target number of items.

The less successful responses in part (a)

* listed the ARRM factors
* provided definitions of the ARRM terms, with no application to the scenario
* referred to the central and/or peripheral route of persuasion (in spite of the instruction to identify the ‘type of learning’ in the question), or referred to schedules of reinforcement.

The less successful responses in part (c)

* discussed positive, rather than negative reinforcement; i.e. the contracts were a pleasant stimulus to continue desired behaviour. It was evident that many students did not read the question carefully enough. In spite of being told that part (c) was an example of negative reinforcement, many students discussed punishment; e.g. contracts were taken away to stop workers being lazy (or a variation of this), or the one-month contracts were an unpleasant stimulus that was added.

*Question 5*

Students rarely obtained full marks for this question. The main problem was with the basic processes level of explanation in part (a). Students did not explain *how* the basic processes concept can increase optimism.

The more successful responses in part (a)

* demonstrated an understanding that a basic processes level of explanation focuses on the ‘psychological processes that are universal (or at least very widespread) across humans’, as stated in the subject outline
* referred to learning types, in particular operant conditioning (a reward for positive thinking to increase its frequency of occurrence) or observational learning (observing someone who is optimistic and reproducing his/her behaviour) to increase optimism
* included explanations of the process of learning in cognitive-behavioural therapy (CBT), and how the changes in thoughts and behaviour can lead to more optimism.

The less successful responses in part (a)

* only described what people could do to increase optimism, instead of how; common answers included positive thinking styles, positive self-talk, and changing cognitions
* included discussions of other levels of explanation: biological (sleep, exercise) and person (confidence, assertiveness).

Part (b) concerned a sociocultural level of explanation, which ‘addresses the influence of other people and the cultural context in shaping behaviour’.

The more successful responses in part (b)

* included the support provided by family/friends/support groups
* identified acceptance provided by warm interpersonal relationships.

The less successful responses in part (b)

* identified social support but did not relate it back to optimism
* referred to social comparisons to increase optimism without elaboration.

Students should be aware of the direction of the interactions they are discussing. From a sociocultural level of explanation, the direction is *from* the external environment. Students should be considering the active agent in their responses.

*Question 6*

Overall, the phobia question was very well answered.

The more successful responses

* referred to Jonathon’s phobia being both irrational (snakes unlikely in the centre of a big city) and having a significant impact on his life (unable to go outside)
* discussed systematic desensitisation, identifying the components of the therapy (relaxation techniques, progression through an anxiety hierarchy) and relating them back to the scenario.

The less successful responses

* repeated information provided in the question
* defined a fear, not a phobia
* unnecessarily discussed the process of developing a phobia, the classical conditioning process, or having a direct experience with a snake
* simply gave definitions of CBT, with no reference to the scenario
* struggled to have two separate points on CBT, describing the behavioural component of the CBT but not the thoughts, or vice versa.

*Question 7*

The more successful responses

* referred to the release of endorphins/serotonin to help improve low/depressive mood.

The less successful responses

* lacked depth; students did not explain *why* exercise alleviates depressive symptoms
* referred to sleep hygiene improvement, but did not explain how exercise can lead to better sleep, which then can lead to improved mood
* referred to exercise ‘taking your mind off things’ or ‘increasing confidence’, using a personal level of explanation rather than a biological one.

*Question 8*

In the Healthy Minds topic, one of the key ideas is that ‘Definitions of mental disorders are culturally constructed’ and the specific feature AE3 requires students to undertake analysis and evaluation of psychological evidence.

Most students correctly identified day-to-day problems as common to both Japanese and Australian participants, and the biological level explaining the significantly different beliefs about the causes of depression.

Very few students achieved full marks for part (b)(ii). They tended to define and describe CBT well, but were less effective in analysing or evaluating how this process would have to differ between the Australian and Japanese cultures.

The more successful responses

* explained how, for Australians, CBT may need to focus on the negative thoughts regarding poor fitness and poor physical health being the cause of depression; for the Japanese, the negative thoughts about personal characteristics being the cause of depression needed to be refuted.

The less successful responses

* defined and described CBT, without application of the process to the Australian and Japanese cultures as required in the question
* contained acknowledgment that differences in the CBT process were needed, but did not suggest strategies or use the information provided in the table
* referred to one culture only.

*Question 9*

Although students were only required to plot 5 data points in part (a), they were not penalised for incorrect graphing techniques. However, responses did indicate that there is a lack of awareness of the appropriate graphs to be used in particular situations.

The more successful responses in part (a)

* demonstrated accurate plotting of points for full marks.

The less successful responses in part (a)

* included drawing two sets of points, e.g. (1, 1), (2.5, 2.5), (3, 3), and so on
* contained errors when plotting (2.5, 8.0)
* used a column graph
* did not make use of the axis labels.

The more successful responses in part (b)

* indicated that the relationship between computer use and sleep was well recognised, with some students correctly using the appropriate term ‘negative correlation’, though this was not required.

The less successful responses in part (b)

* focused on the one anomalous data set.

The more successful responses in part (c)

* indicated that extraneous variables could not be controlled, with specific examples (e.g. differences in sleep needs/patterns between individuals)
* demonstrated an understanding that a small sample size of five affects reliability.

The less successful responses in part (c)

* suggested that reliability may have been low due to lack of representativeness and replication, and the possibility that some participants had been affected by sleep disorders, without elaboration
* discussed validity rather than reliability, as asked in the question; the point (3.0, 5.0) seemed to distract many students.

The question on focus groups, part (d), was generally well answered.

The more successful responses in part (d)

* demonstrated knowledge of a group setting with a facilitator, the use of open-ended questions, a scribe recording the discussion, and qualitative data produced that could be analysed using content analysis.

The less successful responses in part (d)

* indicated lack of familiarity with focus group procedure and content analysis
* contained examples of questions that generated quantitative data only.

Part (e) on circadian rhythms, and how they could be affected by computer use before bedtime, seemed to be well understood.

The more successful responses in part (e)

* linked circadian rhythms to the light from the computer
* provided rich detail about the impact of light on the inhibition of melatonin secretion and consequent interference with circadian rhythms.

The less successful responses in part (e)

* described circadian rhythms without linking the response to the scenario described in the question
* referred to the light from the screen increasing wakefulness without explanation
* indicated confusion or lack of clarity concerning whether light exposure increased or decreased melatonin levels.

*Question 10*

The more successful responses

* included increased irritability, impaired cognitive function, or lack of concentration in part (a)
* indicated that sleep deprivation could cause people to become aggressive, with consequent negative impacts on relationships
* identified that increased fatigue could cause traffic or workplace accidents.

The less successful responses

* described the effect on the sleep-deprived person only, which did not satisfy the ‘social’ requirement of part (b) (e.g. ‘may lose job due to tiredness’)
* discussed a social situation that *causes* sleep deprivation.

*Question 11*

This higher-order question provided students with the opportunity to provide evidence of their learning in relation to the A1 specific feature, which for the A grade on in the performance standards says: ‘Applies psychological concepts … to suggest solutions to complex problems in new and familiar contexts.’

Part (a) posed fewer problems than part (b).

The more successful responses in part (a)

* described the differences in dreams between REM and non-REM sleep (more vivid dreams occur in REM than in non-REM sleep)
* described any one of blood pressure, heart rate, and respiration speed progressively decreasing in non-REM sleep and increasing back up in REM sleep
* described the presence of [muscle tone](javascript:void(null);) in non-REM sleep contrasted with the absence of muscle tone and skeletal muscle activity in REM sleep, which prevents people from acting out their dreams in REM sleep
* described differences in brain activity: [brainwave](javascript:void(null);) pattern on an [electroencephalogram (EEG)](javascript:void(null);) during REM sleep more closely resembles the waking state than other stages of sleep.

The less successful responses in part (a)

* stated information about one of REM or non-REM sleep stages, instead of both
* described differences in alpha, beta, and delta waves during the stages of sleep, that did not apply to all non-REM stages
* stated that dreams did not occur in non-REM sleep.

The more successful responses in part (b)

* described how dreaming occurs in both types of sleep
* described that both are considered to be an altered state of awareness, with unresponsiveness to some stimuli
* described that repair/restoration occurs in both.

The less successful responses

* compared heart rates and other body functions during sleep to the awake state.

*Question 12*

Students generally obtained full marks for the identification of the sleep disorder described, with the most common answer being ‘insomnia’.

The more successful responses

* included common psychological therapies such as cognitive-behavioural therapy and sleep-restriction therapy.

The less successful responses

* provided strategies (e.g. relaxation, bright-light therapy, electroconvulsive therapy) that were not psychological therapies for the disorder identified from.

*Question 13*

Students provided a range of plausible strategies to reduce Timothy’s arousal level.

The more successful responses in part (a)

* explained how heart rate could be reduced by specific techniques, such as meditation, deep breathing, or listening to calming music
* discussed the need to decrease caffeine intake and explained why.

**The less successful responses in part (a)**

* stated, rather than explained, e.g. ‘meditation helps lower the stress response.’

The more successful responses in part (b)

* identified the link between high levels of arousal and poor performance due to the task difficulty; however, students often provided much more detail than was needed for a 2-mark question
* explained that Timothy may be familiar with the task and hence a high arousal level would have been optimal.

The less successful responses in part (b)

* stated that complex tasks require high arousal.

**The more successful responses in part (c)**

* described the exhaustion stage in general adaptation syndrome (GAS), and linked this to various long-term health issues.

**The less successful responses in part (c)**

* described GAS, or long-term health effects in general, without referring to GAS
* discussed the GAS model, but did not connect the exhaustion stage with any impact on health.

*Question 14*

**The more successful responses in part (a)(i)**

* identified the Delphi technique.

**The less successful responses in part (a)(i)**

* demonstrated an inability to distinguish between research design and research method; for example, answering ‘open-ended questionnaire’ or ‘subjective quantitative data’
* rewrote the information in the question.

Part (a)(ii) concerned explaining an advantage of this research design that is not present in other qualitative designs. While some students did not know the research design name in part (a)(i), most were, however, still able to explain one advantage of the design.

**The more successful responses in part (a)(ii)**

* showed an understanding of the use of experts as distinct from non-expert participants in providing better quality information
* showed an understanding of the advantage of including people from many geographic locations that would be difficult or impossible in other qualitative designs.

**The less successful responses in part (a)(ii)**

* provided a general qualitative design advantage, rather than an advantage of the design used in Investigation 1.

The question on ethics in Investigation 1 was well-answered, with a range of answers earning full marks.

**The more successful responses in part (a)(iii)**

* addressed the well-being issue specific to the scenario: participants were made to remember a stressful period in their lives
* addressed the debriefing issue: although participants were required to recall past traumatic events, there may have been no opportunity for debriefing given their different locations.

**The less successful responses in part (a)(iii)**

* provided a general qualitative design advantage rather than an advantage of the design used in Investigation 1.

Most students correctly identified the research design in part (b)(i) as experimental. Part (b)(ii) concerned explaining the disadvantage of this research design.

**The more successful responses in part (b)(ii)**

* addressed the low external validity of the design, given its artificial environment.

**The less successful responses in part (b)(ii)**

* focused on the data, rather than the design (e.g. the sample size was not large enough)
* described an advantage rather than a disadvantage
* indicated poor understanding about control of variables (e.g. experiments do not have any control of extraneous variables).

The ethics question for Investigation 2 (part (b)(iii)) was generally well-answered. On the whole, it was pleasing to see most students giving very specific answers. Very few gave the same answers as for Investigation 1.

**The more successful responses in part (b)(iii)**

* directly addressed the scenario, with common answers including:
  + deceit (participants had been told they were involved in a marketing campaign, and that a participant had become very ill)
  + lack of informed consent (participants had not agreed to be involved in an investigation on adherence to behavioural policy)
  + debriefing (required because of the deceit: participants believed that one of the others had become ill)
  + well-being (participants would have been concerned that one of the group was now in a critical condition in hospital).

**The less successful responses in part (b)(iii)**

* stated, rather than described
* answered in a very general way.

**Section B: Extended-response Questions** (Questions 15 and 16)

General Comments on Section B

Of the two extended responses, Question 15 was the better answered.

In the extended responses, 4 of the 20 marks in each question are allocated to communication. Students were directed to give ‘clear, well-expressed answers that are well organised and relevant to the questions’. Clear, well-expressed answers do not need to be read several times, are easily understood by new readers, are in complete sentences, and indicate clearly which dot point in the question is being addressed. Dot points may be used occasionally in the answers, e.g. the structure of an attitude in Question 15. Well-organised answers are fluent, with logical sequencing.

*Question 15*

**The more successful responses** for the *impression formation and impression management differences* (first dot point)

* provided detailed descriptions of how impression formation and impression management can occur
* used the actor/observer designations to describe the interactions of participants.

**The less successful responses**

* gave generic responses such as “impression formation is when impressions are formed and impression management is when impressions are managed” rather than addressing differences between the two
* used dictionary definitions of ‘formation’ and ‘management’.

**The more successful responses** for *structure of an attitude* (second dot point)

* discussed the tri-component (affective-behavioural-cognitive) model, and related the theory back to the question.

**The less successful responses**

* contained descriptions of how having a certain ‘attitude’ (e.g. confidence, assertiveness, non-assertiveness, or negative or positive attitudes) affected behaviour
* incorrectly named the affective component as adaptive or attitude
* confused the cognitive component with the affective component.

**The more successful responses** for *functions of an attitude* (third dot point)

* discussed the adaptive function (various equivalent terms were used); rewards were maximised (praise from teacher) and punishments were minimised (misunderstanding of coursework not clarified)
* discussed the ego-defensive function (having a negative attitude towards class discussions protects the student from acknowledging his/her lack of confidence or knowledge on the topic).

**The less successful responses**

* used the knowledge function, confusing it with the adaptive function, and described this function as fact-gathering to gain knowledge to get good marks in tests or as gaining knowledge from other students during discussions.

**The more successful responses** for *the bidirectional relationship between* *attitude and behaviour* (fourth dot point)

* contained clear statements that attitude (A) influences behaviour (B), but behaviour also influences attitude
* described how assertive body language contributed to a more positive attitude towards class discussion (B → A); and that a more positive attitude increased participation in class discussion (A → B).

**The less successful responses**

* provided definitions, but neglected to apply the terms to the scenario
* focused on one direction only in the bidirectional relationship; e.g. ‘Students who had a positive attitude were more likely to be assertive, but students who had a negative attitude would not contribute in class.’ Both examples are about attitude influencing behavior. Students cannot claim that, because the behaviours involved are opposite, this is an example of a bidirectional relationship.
* described cognitive dissonance well, but did not relate it to the question
* used random examples; e.g. ‘If you don’t like a person, you won’t be kind to them; but if you are not particularly nice to a person, you will not like them,’ or ‘If a person has an accident, then his attitude to speeding will become negative.’

*Question 16*

The subject outline states that the Personality topic ‘focuses on concepts of personality and personality assessment’ and one of the key ideas is ‘Ways of measuring personality are linked to particular beliefs about its structure’. Thus, it was pleasing to see that many students knew ‘the main forms of personality assessment used today, including standardised self-report inventories, clinical interviews, and behavioural observations’ and some were able to successfully link these to beliefs about the structure of personality.

However, it was disappointing to see that a significant number of students did not attempt this question, perhaps suggesting lack of familiarity with the concepts being assessed.

The first dot point was about the purpose of personality assessment methods.

**The more successful responses**

* discussed projective tests, various versions of standardised self-report inventories, clinical interviews, and behavioural observations
* briefly discussed the format of the personality assessment (questionnaire, rating scale, data type), followed by the purpose (job selection/suitability, counselling, diagnosis).

**The less successful responses**

* discussed personality theories rather than assessment methods (although in some cases, students were able to receive credit for relevant statements made)
* described assessment methods in general terms
* wrote about non-personality tests, e.g. EEG.

For the second and third dot points, students were required to describe one advantage and one disadvantage of each method.

**The more successful responses**

* often used information drawn from Introduction to Psychology knowledge, including the advantages and disadvantages of objective quantitative measures (e.g. behavioural counts), subjective quantitative measures (e.g. responses on checklists and rating scales), and qualitative measures (e.g. biased interpretations of descriptions in projective tests and clinical interviews).

Examples of some good responses were:

* + ‘Qualitative data are descriptive and detailed, which allow deeper insight to individuals’ thoughts and feelings, and therefore a greater understanding of personality.’
  + ‘The answers in self-reports may be biased. Clients provide answers that are socially desirable. This is a disadvantage because it may lead to an invalid assessment of personality.’

**The less successful responses**

* used the same advantages and disadvantages for both assessments, rather than the specific details for each test, e.g. ink blot vs TAT
* omitted any discussion of validity and/or reliability of personality assessments.

For the fourth dot point, ethical considerations in personality assessment methods seemed to be confused with those in research.

**The more successful responses**

* discussed unwanted self-knowledge from personality assessments, which may reduce confidence or self-esteem
* discussed the necessity for assessment methods to be valid and reliable because they are often used for life-changing decisions in a person’s life.

**The less successful responses**

* included a list of general ethical considerations without relating them to assessment methods
* contained references to experimental conditions, rather than personality assessment methods.

Students need to differentiate between the standard professional tests administered by psychologists and psychiatrists, which are not available online, and ‘personality-like’ tests that are. The ready access to the latter may have led a number of students to discuss an advantage as being easy to access, with instant results.

## Operational Advice

School assessment tasks are set and marked by teachers. Teachers’ assessment decisions are reviewed by moderators. Teacher grades/marks should be evident on all student school assessment work.

For moderation of Assessment Types 1 and 2, teachers are reminded to submit the learning and assessment plans (LAPs) with the addenda for any LAP changes. They should also include any Variations — Moderation Materials forms.

All assessment items should be submitted for moderation with clear indication of the teacher’s assessment decisions. When students give oral presentations, evidence in the form of transcripts or PowerPoint slides should be presented. Evidence of student collaboration through the use of self-assessment and/or peer-assessment is often useful.

Teachers are also encouraged to seek the most up-to-date information on the SACE Board website. References to SSABSA and the use of outdated performance standards should be avoided.

Psychology

Chief Assessor