

Psychology

2014 Chief Assessor’s Report

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## 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.

The enrolments in Stage 2 Psychology have remained consistently high with 2482 students in 2014. Six students were also assessed for a 10-credit subject. Overall achievement in the subject remained consistent with previous years: approximately 24% in the A band, 44% in the B band, and 26% in the C band.

## School Assessment

The two school assessment types were centrally moderated according to the SACE Board’s requirements, policies, and procedures.

Assessment Type 1: Investigations Folio

The investigations provide students with the opportunity to experience evidence-based research. Teachers in their early years of delivering this subject should seek the support and guidance of experienced teachers in the community to ensure that they are following the guidelines and procedures in a way that allows their students to demonstrate their skills of investigation, analysis, and evaluation.

Overall teachers showed excellent understanding of the performance standards and their application to student evidence in this assessment type. This resulted in only a limited number of moderation adjustments. The following comments are to support and further refine understanding.

Although quantitative data is clearly preferred by most students, reports based on qualitative data were generally of a higher quality. This option is important to offer to students who are less capable with mathematics and statistics. Students with strong literacy skills show good ability to communicate their understanding in qualitative reports and generally achieve at a high level in the specific feature KU3.

Moderators commented consistently on three major aspects of the presentation of investigation reports.

Firstly, some students proposed investigations which were not suitable given the data collected. Some used data that did not match their hypothesis. Teachers are reminded that they are responsible for approval of research proposals before students proceed with data analysis. This step minimises the chance that students cannot support their hypothesis within the confines of the collected data.

Secondly, evaluation should be specific to the data that is collected, the sample used, and the investigation design. Many students focus only on the inherent flaws in the sample, without explicitly outlining how these flaws have affected their data or suggesting improvements that would minimise the effects of these flaws. Comments on the relative strengths and weaknesses of data collection and investigation design need to relate directly to the research program under discussion. General comments about the convenience or ease of data collection do not demonstrate performance at the upper levels for the criterion of analysis and evaluation.

Thirdly, students should demonstrate their capacity for communication. In a report of this length, subheadings should be kept to a minimum. It was noticeable that students who used multiple subheadings usually offered only one idea per heading therefore limiting their ability to show perceptive and thorough analytical skills. In addition, many students used commentary on the sample under every subheading, thereby repeating themselves multiple times. If this was paired with a very general understanding of the effects of the sample, students could usually only provide evidence in the C band for analysis and evaluation.

To avoid these problems, teachers are advised to be strategic in their use of the drafting and/or checklist processes. A brief check of student proposals, then a further check of the data presentation is likely to avoid students setting up proposals that are untenable as an investigation in the context of the data collected. Although students will need guidance in their discussion, teachers should be aware that strict templates and overuse of electronic review comments can lead to a lack of creativity in students’ reports. By way of providing some kind of structure for their students, teachers could pose questions such as ‘What are you hoping to show using the data?’ or ‘What will your data analysis look like when you are finished?’ In the evaluation of the investigation, teachers could ask students to consider the procedures used at the time of the data collection and how these might have specifically affected the data and in what direction.

Further to these three areas, the quality of evidence provided by students could be further improved by noting the following:

* Raw data should not appear in the report. Using raw data suggests that students do not understand the concept of statistics and the concept of central tendency. Using raw data disadvantages students as it is very difficult to formulate a conclusion from raw data.
* To achieve at an A band for presentation of data (specific feature I4), students should ensure that they follow graphing conventions and use an appropriate scale when presenting quantitative data in a graph. Students who use a truncated scale are often disadvantaged as they conclude that there is a clear result when in fact the scores were very similar. This leads students to making incorrect conclusions about the data. Students are also advised to take care with choosing an appropriate type of graph (e.g. bar, line) for the data that they are graphing.
* Students should be careful using terms such as ‘significant’, ‘prove’, and ‘systematic errors’. These terms have very specific meanings within the field of psychology and by using these terms inappropriately students often indicate that they do not fully understand them.
* A long description of the method used to collect data is unnecessary. Such a description could disadvantage students as they have used valuable word-count on a method prescribed in the research program which could leave insufficient words for enough detail in the evaluation section to gain a high grade.
* In general, students are advised not to use excessive statistics. Students should only use standard deviation if they have a good understanding of it and if it helps to describe their data.
* For the group investigation, teachers are advised to provide evidence of students’ collaboration; for example, through the use of teacher observations, self-assessment, or peer assessment. Two exemplars of assessment sheets for specific feature A3 are available on the Psychology minisite of the SACE website.

Assessment Type 2: Skills and Applications Tasks

The skills and applications tasks consisted mainly of tests and internal examinations, with one or two assignments. Most of the student evidence was written, although some produced oral and multimedia presentations. Once again as in the Investigations Folio, teachers showed excellent understanding of the performance standards and their application to student evidence. The design of tasks did however cause some adjustment of grade levels. The following is for further advice.

Teachers should ensure that tasks allow students to demonstrate depth of ability in the A grade bands of the performance standards. Brochures and posters often do not allow for work in the upper grade bands unless higher-order thinking is required in the design of the task. It is important to set tasks that allow students to demonstrate at an A grade band across all criteria. Sometimes tasks were heavily weighted to knowledge and understanding but provided minimal opportunities for students to demonstrate ability in analysis and evaluation or application.

Tasks should be clearly linked to the topics within the Stage 2 Psychology subject outline. Teachers should avoid giving students free choice to do a task on any topic related to any field within psychology. When students choose topics outside of the subject outline, it has the potential for students to choose topics or areas of focus which raise ethical concerns and these may disadvantage students in their preparation for the examination, as they may misunderstand what content is actually likely to be examined.

Teachers are advised not to use in their entirety a series of tasks for which there are published solutions. Past examination questions provide a valuable resource for teachers when preparing tests and revision. However, teachers are encouraged to use these as a guide and to adapt them and, in particular, to rewrite scenarios. This is important for both the validity of assessment during the year and for students’ preparation for the end-of-year examination. Students need to be able to demonstrate their ability ‘to suggest solutions to complex problems in *new* and familiar contexts’ (in relation to specific feature A1; emphasis added). It is valuable for teachers to develop different formats for questions so that students gain experience with novel ways of being asked about familiar content.

**External Assessment**

Assessment Type 3: Examination

The examination is in two sections: short-answer questions worth 80 marks and extended-response questions worth 40 marks. The examination is divided into six topic headings and also includes questions on ethical issues and the four levels of explanation of behaviour used in psychology.

The examination was marked out of 120 marks, using established conventions for marking, and the setting of the examination conformed to specifications in the 2014 subject outline and subject operational information. The mean score for the examination was 62%.

The mean marks for each topic, ethical issues, and the four levels of explanation of behaviour are shown in the following table:

| Topic | Mean Mark 2014 (%) | Mean Mark 2013 (%) |
| --- | --- | --- |
| Introduction to Psychology | 61 | 64 |
| Social Cognition | 63 | 75 |
| Learning | 59 | 70 |
| Personality | 59 | 58 |
| Psychobiology of Altered States of Awareness | 61 | 60 |
| Healthy Minds | 64 | 70 |
| Ethical Issues | 66 | 68 |
| Four Levels of Explanation of Behaviour | 76 | 70 |

These percentages reflect consistent learning in all aspects of the course.

Personality continued to be a challenging topic for students, having the lowest mean score. Students need to demonstrate an understanding of the three theories of personality, not just as a collection of individual concepts, but as a coherent explanation for patterns of human behaviour.

Some individual questions in the Learning topic proved most challenging for students, whereas concepts in Introduction to Psychology were well understood by a significant majority of students.

As a general observation, many students show their clear understanding of the key terminology in psychology and gained marks for this. However there are still some students who lost marks through the use of everyday language, thereby not demonstrating knowledge of the correct terms. Further to this, many students did not provide full accounts of concepts and only demonstrated understanding of a general nature. Greater precision in the expression of ideas would improve grades for these students.

Section A: Short-answer Questions

In general, 2 marks are allocated for one well-expressed idea or piece of information. Question 18 was an exception to this allocation, where a list of symptoms was required and considered to be less affected by expression.

Questions that require a detailed explanation are usually worth 4 marks and therefore, to obtain full marks, students must supply two relevant and connected pieces of information. Students need to be mindful not to use the wording of the question as if it was an answer in itself.

The short-answer questions varied in difficulty from those that required straightforward, easily reproduced knowledge to those that required skills of critical understanding, problem-solving, and/or application of psychological principles.

Students who performed well demonstrated that they understood the distinction between the key verbs used in the question. They recognised, for example, the difference between ‘identify’, ‘describe’, ‘discuss’, and ‘explain’ when answering questions.

When questions are divided into parts, students need to recognise the relevance of each part of the question to the opening scenario. Students achieved at higher levels when they provided clear and concise answers directly related to the scenario rather than generic answers. They should avoid writing irrelevant information that may lead them to answer incorrectly as answers that contain contradictory notions cannot receive full marks. The number of lines provided for the answer in the examination paper gives an approximate guide to the average length of response required. It may be useful for students to practise answering within the lines provided, using past examination papers. .

Teachers are advised to address these issues during the teaching program so that students are able to use a wider range of examination-answering techniques.

The mean mark for each question in Section A is shown in the following table:

| Question | Maximum Mark | Mean Mark | Mean (%) |
| --- | --- | --- | --- |
| 1 | 2 | 1.59 | 79 |
| 2 | 4 | 2.89 | 72 |
| 3 | 2 | 1.83 | 92 |
| 4 | 4 | 2.21 | 55 |
| 5 | 4 | 2.62 | 65 |
| 6 | 4 | 2.49 | 62 |
| 7 | 4 | 2.93 | 73 |
| 8 | 4 | 2.36 | 59 |
| 9 | 4 | 1.70 | 43 |
| 10 | 4 | 1.97 | 49 |
| 11 | 4 | 2.00 | 50 |
| 12 | 2 | 0.65 | 32 |
| 13 | 4 | 2.81 | 70 |
| 14 | 4 | 2.09 | 52 |
| 15 | 4 | 2.34 | 59 |
| 16 | 2 | 1.56 | 78 |
| 17 | 4 | 2.39 | 60 |
| 18 | 4 | 3.36 | 84 |
| 19 | 4 | 2.65 | 66 |
| 20 | 4 | 2.79 | 70 |
| 21 | 2 | 0.96 | 48 |
| 22 | 6 | 3.13 | 52 |
| Section A Total | 80 | 49.32 | 62 |

### Question 1

This question on the limitations of a sample was most commonly answered correctly, with students describing the sample as being too small to represent the population. Many students lost 1 mark for only offering ‘the sample size is too small’ and not describing the limitation associated with this.

### Question 2

This question on the difference between validity and reliability produced a full range of marks in student responses. Many students understood one concept but not the other, most commonly reliability was less well understood. Some students answered with two definitions but did not relate these back to the monitor in the scenario of the question.

### Question 3

With the highest mean of the exam, this question on ethical issues in research was answered correctly by the majority of students.

### Question 4

Content analysis was well understood and the procedure described correctly by most students. The most common error was for students to answer with a description of how to conduct a focus group.

### Question 5

The most frequent answer about experimental design was to focus on the presence of a control group and how this allows causation. Some students lost marks by not referring back to the scenario.

### Question 6

This question, which tested scientific numeracy and, in particular, the ability to derive information from graphs, was generally well done. However it is evident that standard deviation and its connection to the mean are not completely understood by all students. Some students were unable to effectively interpret the graph and confused the frequency and heart rates.

### Question 7

This first question on the Learning topic, specifically negative reinforcement, posed few problems, with most students able to answer correctly. Marks were usually lost where students gave incomplete or vague descriptions of negative reinforcement.

### Question 8

This question highlighted those students who could clearly demonstrate their definitions of key terms and show application through their chosen example in part (b). Some students were unable to clearly define their chosen schedule, often confusing intervals and ratios. Another common mistake was to state that positive reinforcement is in itself a schedule.

### Question 9

A variety of answers were offered for this question on acquisition and performance phases in classical conditioning. Many students misread the question and tried to fit the terms to observational learning. Others produced a jumble of terminology related to stimulus and response, including unconditioned stimulus, unconditioned response, conditioned stimulus, and conditioned response, without a clear sense of how these terms are connected to the phases of learning. A greater than average number of students left this question blank. This highlights the need for students to cover all required aspects of the course according to the subject outline.

### Question 10

Stimulus discrimination brought up a range of misunderstandings in student responses. Many students confused the red and green lights and did not clearly describe that the association was made with the red light, while no association was made with the green light. Incorrect terminology, such as the pigeon ‘knowing’ that food comes out with the red light, also hindered the scores of many students.

### Question 11

Behaviour modification involves more than one occasion of simple positive reinforcement. Students often lost marks by only showing this limited knowledge of the process. It is also important that students do not use punishment in a behaviour-modification scenario.

### Question 12

This question showed the lowest mean of the examination. Two issues emerged in student responses: those that did not clearly understand objective measures and those that suggested measures that have no relevance to personality assessment. A high number of students left the question blank.

### Question 13

A well-answered question; most students can effectively apply their knowledge of trait theory.

### Question 14

In this question based on the difference between humanistic and psychodynamic theories, many students summarised each conception rather than describing a difference. Some students demonstrated limited understanding of the meaning of the difference they described by completing their answers with information irrelevant to the theories.

### Question 15

Psychodynamic theory and its application to a fictitious person gave rise to a wide range of answers from students. For the most part, students demonstrated their understanding of the theory, but often omitted the connection to the scenario.

### Question 16

This question had the highest mean in the section on Personality, with most students identifying matching personality traits with suitability for particular jobs in their answer.

### Question 17

Although this question asked about ethical issues in personality assessment, most incorrect answers centred on validity and reliability issues without going into the ethical issues arising from this.

### Question 18

Symptoms of anxiety were easily identified by almost all students. Where mistakes were made, it was generally because of listing symptoms from another level of explanation of behaviour.

### Question 19

Students demonstrated good understanding of anxiety and factors that contribute to it.

### Question 20

Some students answered with two very similar responses but the best answers used two very different reasons about why walking with a group would help cope with stress. Often the benefits of exercise were poorly explained or explained in everyday language with low use of terminology.

### Question 21

A variety of errors contributed to a low mean score for this question. Some answers did not relate to resilience, while others did not use the person level of explanation of behaviour. The most common correct answer was an optimistic personality.

### Question 22

Answers relating to cognitive-behavioural therapy would be improved with greater use of terminology and a clearer explanation of both the cognitive and behavioural changes that are being sought by the treatment. In part (b), many students gave good answers focused on situations where the cause of depression is biological.

Section B: Extended-response Questions

Each extended-response question was marked out of 20, with 16 marks allocated for content (each well-expressed idea or piece of information worth 2 marks) and 4 marks for communication. Questions 23 and 24 had four content parts, each of which was marked out of 4.

The following factors were taken into account when a communication mark was awarded:

* Was the answer clear and well expressed?
* Was the answer well organised?
* Was the answer relevant to the question?

Nearly all students who sat the examination offered responses to both Question 23 and Question 24. In general, students produced well-structured responses of an appropriate length. As a general observation, it is the use of everyday language rather than psychology terms that leads to inaccurate answers. Furthermore, students should be made aware that questions asking for discussion require more detailed responses than short-answer questions.

Question 23

Responses to this question on the Social Cognition topic varied in quality, with a mean of 12.57 marks, or 63%.

Dot point one: factors about the source

Most students who correctly answered this dot point wrote about the credibility, expertise, attractiveness, or likeability of the source. Common errors included writing about the routes of persuasion, or message or audience features.

Dot point two: features of the message

Upon reaching this dot point in their answer, some students had already confused source and message factors and quite often audience factors too. Messages that evoke strong emotion, or target the central or peripheral routes of persuasion by the way they are constructed were common answers.

Dot point three: function of a negative attitude

This part of the question was the least well answered, with many students giving a general description of how having a negative attitude keeps you healthy, rather than using a fuller description of the adaptive function. It would seem that many students did not recognise the functions of attitude as a part of the curriculum.

Dot point four: bidirectional relationship

This dot point produced a variety of answers, mostly correct. Common errors were poor expression around the bidirectional nature and confusion with other concepts such as attitude strength and specificity.

Question 24

Responses to this question on Psychobiology of altered states of awareness varied in quality, with a mean of 12.24 marks, or 61%.

Dot point one: two symptoms of sleep deprivation

Although students could adequately identify symptoms of sleep deprivation, many omitted the connection to performance by the nurses.

Dot point two: long-term health of nurses

Most students who answered well used a clear outline of the general adaptation syndrome and how this leads to poor immune functioning.

Dot point three: strategies to reduce sleep deprivation

A mixture of answers was used correctly here regarding efforts made by employers or the nurses themselves.

Dot point four: one stage of sleep

This dot point did not cause many problems for students, except where they had imprecise descriptions of their stage of sleep or gave illogical suggestions for how it would be affected for the nurses.

## Operational Advice

School assessment tasks are set and marked by teachers. Teachers’ assessment decisions are reviewed by moderators. The presentation of nominated samples of student work was generally very helpful to moderators. It is useful if teacher grades/marks are evident on all student school assessment work. Moderators are looking to confirm teachers’ decisions and are supported in doing this when they can see the teacher’s original feedback, marks, or grades.

Teachers should include sets of work for all students nominated by the SACE Board. When there is no student work, moderators are unable to confirm the teacher’s decisions. Teachers should only submit pieces of work that are part of that assessment decision (that is, no formative work or drafts should be submitted). Student work must be clearly identified with the student’s name and/or SACE registration number to enable moderators to identify samples for each grade band.

Assessment of oral presentations should be supported with evidence of the student’s presentation (e.g. printouts of PowerPoint slides, transcripts, and cue cards). Evidence of feedback from teachers and peers is also useful in confirming the consistent application of performance standards. Electronic feedback often made it difficult to distinguish between teachers’ comments and students’ work.

Approved learning and assessment plans are required from each assessment group. All tasks in the learning and assessment plan (LAP) are to be assessed for all students. If a task needs to be removed, altered or replaced for the whole group then notes of explanation must be recorded in the addendum. The Variations — Moderation Materials form is required for individuals when there have been special provisions or a breach of rules, or if work (submitted or not) is missing. Where tasks have not been submitted by a student, it should be clear that an adjustment has been made to their overall grade that reflects the missing evidence.

Teachers are encouraged to include comments indicating how an overall grade level was allocated for an assessment type. Individual tasks within an assessment type should not be allocated weightings. Overall grades for an assessment type are best made by reviewing the set of tasks as a whole, assessing each specific feature across all tasks. Teachers should ensure that the grade levels allocated on the sets of work match the grade levels on the school assessment online results.

## General Comments

Teachers should refer to the subject outline and support materials on the Psychology minisite for information and advice about each of the school assessment types.

It is recommended that teachers consider joining the online community for Psychology, via the Psychology minisite, to make connections with other teachers and receive up-to-date information.

New teachers are encouraged to seek clarification and advice early in the year by attending clarifying forums and contacting the SACE Officer — Curriculum.

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