Psychology

2012 Chief Assessor's Report

Government of South Australia

SACE Board of SA

PSYCHOLOGY

2012 CHIEF ASSESSOR'S REPORT

OVERVIEW

Chief Assessors' reports give an overview of how students performed in the 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.

This is the ninth year in which Psychology has been assessed as a SACE subject. The enrolment numbers increased from about 2100 in 2011 to 2500 in 2012. Four students were assessed for a 10-credit subject.

The mean score for the examination was 59.5%. The table below gives information for the last 3 years:

Year	*Enrolment Numbers*	*Examination Mean (%)*
2012	2503	59.5
2011	2152	57.4
2010	2869	60.2

Overall achievement in the subject remained consistent with previous years: approximately 21% in the A band, 43% in the B band, and 27% in the C band.

Teachers have consolidated their assessment practices, using performance standards for the second time in 2012, allowing students to show their capability in this subject. Psychology remains a very accessible and important subject for scientific and mental health literacy in South Australian secondary education.

SCHOOL ASSESSMENT

The two school assessment types were centrally moderated according to the SACE Board's requirements, policies, and procedures. Schools submitted the sets of evidence requested by the SACE Board. This assisted the moderation panel in validating and confirming teachers' judgments of student learning.

Moderation helps to ensure fairness to students and to provide the wider community with reliable information about student performance. Moderators are trained teachers and academics. Pairs of moderators viewed the sets of evidence in assessment types and across a number of grade levels. The pairing of moderators was changed regularly so that the standards set during the training period were consistent during the moderation period.

Although adjustments were made across both assessment types during the moderation process, the marking of the sets of student evidence in the skills and

application tasks was able to be validated against the performance standards more consistently than was the case with the investigations folio. This indicates that, in general, teachers are providing valid assessment tasks and judging student performance with greater accuracy in this assessment type.

In comparison with previous years, significantly fewer classes had results changed during moderation. Whereas in previous years approximately 50% of all classes had some results adjusted, in 2012 only 43% of classes had marks changed. When results were moderated downwards, it was usually as a result of overgenerous marking in the A and B grade bands in the investigations folio. When results were adjusted upwards, most changes were made in the D and E grade bands. Students at these grade levels had demonstrated knowledge and understanding of only a general or limited range of psychological concepts.

Assessment Type 1: Investigations Folio

The investigations folio continues to provide students with experience of evidence-based research in Psychology. Supporting material is widely available and teachers' understanding of the tasks involved has matured. Teachers in their early years of delivering this subject should seek the support and guidance of experienced teachers in the community. For example, teachers need to ensure that they are using the current Board-approved research programs and following the guidelines and procedures carefully to allow students to demonstrate their skills of investigation, analysis, and evaluation. Extensive literature review or information-based research in this assessment type is to be discouraged. Students should see the investigations folio as an opportunity to collect and analyse data, form conclusions about those data, and evaluate their procedures. When they do this, they experience first-hand research with all its strengths and flaws and understand how knowledge is accrued in Psychology.

Investigation reports were typically presented with the headings: introduction, results, and discussion. There is no need for a method section as it is not a requirement of the subject outline and it is not assessed. Students who demonstrated evidence of their learning at the A level did not complete a method section and used their discussion for analysis and evaluation. Extensive support from teachers and/or the use of templates for reports are discouraged as they do not allow students to demonstrate perceptive analytical skills.

Students who submit their proposals with their group and individual investigations help moderators to understand the focus of their investigation. A word count printed on each piece of student work is helpful.

Introductions on the whole were extremely brief and did not allow for demonstration of the investigation assessment design criterion. Students who wrote good introductions were able to present the premise of their investigation and show how the data they selected would be analysed to form a conclusion about their research question. Students who undertook a literature review in the introduction were not able to effectively evaluate their research in the discussion while keeping to the word count of 1500 words. Teachers are discouraged from using the investigations folio to address specific feature I2 (Critical selection and acknowledgment of information about psychology and issues in psychology from different sources) in any depth. This was better handled by students in a skills and applications task.

Students are discouraged from overusing tables and graphs and mixing data types (i.e. qualitative and quantitative data) in the results section. Students who presented many graphs/tables were not able to interpret them adequately within the word count. Only graphs/tables relevant to the hypothesis or research question are necessary and there should be a corresponding discussion of each later in the report. Students should not present raw data in the results section of the report unless relevant to the data analysis (i.e. for graphs of correlation). Students who used graphs correctly had appropriate labels on each of the axes and had adjusted the scale (typically automatic in Microsoft Excel) to be a better representation of the range of scores being analysed. Students should not present multiple variables on graphs when the variables have a different scale and meaning. Typically, students in the A band presented single variables on each graph for either pre-test and post-test data or comparison of experimental and control groups. Graphs were clearly labelled, suitably scaled, and given an appropriate title.

Students' discussion section typically consisted of three elements: analysis of the result evident in their data, evaluation of the procedures, and a conclusion about the evidence presented. Teachers could help students in this section by explicitly teaching the skills of data analysis. Students could improve their grade by describing the result as shown in the data analysis and then going on to formulate a relevant conclusion that is connected to the hypothesis or research question. Many students did not adequately address this requirement in their reports. To achieve a result in the A and B grade bands, students needed to show higher levels of evaluation of procedures rather than data. Teachers need to ensure that students evaluate investigation design, procedures, and ethics not generically but specifically in terms of the research program conducted if they are to demonstrate A level analysis and evaluation. For example, students might evaluate the validity and reliability of the procedures used to collect heart rate data, rather than saying that they did not consider the heart rates they recorded were suitable to support a particular hypothesis. Similarly when discussing strengths of a procedure, students should relate the discussion specifically to the procedures used, rather than general strengths of a particular investigation design. For example students often stated that a strength of an investigation is that it is "easy to conduct" or "cost-effective". When discussing strengths it is more important to focus on what features of the investigation design give it strength in terms of forming a valid conclusion, rather than the strength of being easy or cost-effective to run.

Concluding statements only need to very briefly summarise the major finding from the investigation (i.e. what the student concluded from the investigation). To achieve the higher grade bands, students are reminded to list improvements to the design of the investigations as well as the strengths and weaknesses of the design and the quality of the data.

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 a minority produced oral presentations on DVD/CD.

Student evidence of learning was confirmed more consistently in this assessment type than in the investigations folio. Teachers' assessment decisions were more accurate when tests were used, although the student cohort and context should be considered when a learning and assessment plan is being developed, as some

students could have more effectively demonstrated their learning with alternative modes of communication.

Teachers are reminded to address each of the four assessment design criteria across a set of skills and application tasks. The tasks should reflect the topics in the Stage 2 Psychology subject outline and be assessed according to the performance standards shown on the school's learning and assessment plan. Teachers are advised not to use a series of tasks for which there are published solutions.

The design of tasks was the most common reason for the adjustment of grade levels, where the only evidence that students were achieving A levels in their tasks was against the knowledge and understanding criterion. Teachers should ensure that students have the opportunity to demonstrate analysis and evaluation, for example, through the use of scenarios, film reviews, or questions that allow them to give examples that demonstrate their knowledge as well as their ability to apply, analyse, and evaluate. When this was not evident, the students were not able to achieve an A standard. Tasks that limited student performance were evident in tests that relied heavily on simple multiple-choice or short-answer questions. Teachers are encouraged to allow students to practise the application, analysis, and evaluation of their knowledge in Psychology by creating tasks that include examination-style questions such as extended-response.

The application of performance standards was used to determine the teacher's assessment decision. Marks were also widely used and provided additional information for the moderators.

Teachers are advised to set reasonable word-limits in this assessment type (i.e. between 1000 and 1500 words). Longer pieces of work did not necessarily attract higher levels of achievement and usually resulted in student work that lacked clarity and discernment in the presentation of information.

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 2012 subject outline and the *Sciences 2012 Learning Area Manual*.

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 % 2012*	*Mean Mark % 2011*
Introduction to Psychology	62.02	67.67
Social Cognition	68.86	71.02
Learning	60.53	56.44
Personality	46.77	46.95
Psychobiology of Altered States of Awareness	65.69	51.02
Healthy Minds	51.16	57.99
ethical issues	52.08	74.67
four levels of explanation of behaviour	62.54	53.91

Average marks in each section show that this year's cohort demonstrated evidence of learning in all aspects of the course.

In terms of specific content areas, Personality had the lowest mean. Personality was tested in the short-answer section this year and students found Questions 22 and 23 most challenging.

Students understand ethical issues less well when the issues are applied outside the context of human research. Teachers should explicitly cover aspects of ethical issues in each of the six content areas so that students may appreciate the ethical issues in the application of psychological principles. In particular, students should demonstrate knowledge of the ethical use of animals in research and the ethical treatment of patients in the clinical setting.

Section A: Short-answer Questions

In general, 2 marks are allocated for one well-expressed idea or piece of information. 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.

In general students were able to demonstrate their knowledge, using appropriate psychological terminology. Students often lost marks by not understanding the meaning of the key verb used in the question and did not, for example, recognise the difference between 'state', 'describe', and 'explain'. Furthermore, some students gave generic answers when the question asked for a response directly related to the information provided in a scenario. When questions were divided into parts, students sometimes did not see how the parts were connected, or the relevance of each part to the opening scenario. Students should avoid writing irrelevant information that may lead them to answer incorrectly.

Students who performed well provided clear and concise answers directly related to the scenario. The number of lines provided for the answer in the examination paper

gives an approximate guide to the average length of response required. Students cannot lose marks for the volume of their response, but it may be useful for them 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 table below.

Question	*Mean Mark*	*Maximum Mark*	*Mean (%)*
1	1.36	2	68.00
2	1.01	2	50.42
3	4.10	6	68.40
4	3.24	4	81.05
5	2.66	4	66.45
6	0.90	2	45.13
7	3.01	4	75.29
8	2.71	4	67.74
9	1.55	2	77.50
10	1.58	4	39.52
11	1.29	2	64.56
12	1.57	4	39.31
13	2.17	4	54.21
14	1.85	2	92.37
15	2.10	4	52.38
16	2.24	4	55.99
17	1.67	2	83.53
18	2.23	4	55.63
19	3.34	6	55.69
20	2.53	4	63.27
21	0.73	2	36.28
22	0.71	2	35.69
23	2.57	6	42.90
Section A totals	47.12	80	59.62

Question 1

Students generally were able to identify subjective methods based on self-report. The most common error was to omit reference to how the method would be quantitative, and therefore many students scored only 1 mark.

Question 2

To score full marks for this question, students needed to link the features of quantitative observational investigations to an advantage of using that design.

Many students offered a feature of the investigation design without describing how that provides an advantage to the research. Students are advised to read questions carefully and make sure that their answer addresses the key element.

Question 3

In answering part (a) of this question, students scored highest marks when they carefully described two aspects of a focus group without assuming any aspects. They referred to the size and nature of the group, the type of interactions in the group, or the role of the facilitator or the scribe. One common error was to describe content analysis rather than the focus group process. In part (b) most students correctly identified the limitation as the small sample size, leading to issues of validity.

Question 4

Most students showed a thorough understanding of the structure of attitudes, with almost all answers using the ABC or tricomponent model. A few students confused the 'A for Affective' and instead answered 'A for Attitude'.

Question 5

Most students understood the basic functions of attitudes; however, many students were unable to gain full marks because of the lack of convincing detail in their answer. Students need to offer some depth and connectedness in their answers in order to fully demonstrate their understanding of key concepts.

Question 6

As with Question 2, many students named a disadvantage of these measures, but were not able to complete the answer with a description of how this could be a disadvantage when trying to assess attitudes. Students should be aware that a question that requires a description must be answered fully, even if note form is used.

Question 7

Answers to this question about downward social comparison were generally correct. The most common error was to omit half of the question (i.e. the example of why a person might feel better).

Question 8

In this question about factors that influence attitude change most students scored either 3 or 4 marks. The most common error was to name or describe a factor, but not relate it convincingly to how it encourages people to donate to charity.

Question 9

Most students answered this question correctly. Errors usually occurred when the factor used in the answer did not relate well to the scenario of a radio announcer.

Question 10

Many students confused the basic processes level and the person level of explanation, and scored zero for the entire question. Others simply named a factor, for example, ‘optimist’, without providing a description.

The relatively poor answers to this question suggest that teachers need to more explicitly teach the differences between the four levels of explanation. It was evident in their responses that students do not have a clear understanding of the difference between the basic processes level and the person level.

Question 11

Students gave good answers to coping strategies for the relief of anxiety. Some students need to clarify with their teacher why medication and sleep are not seen as coping strategies.

Question 12

This question had a very low mean, primarily because students did not talk about advantages and disadvantages in their answer. Instead, they tended to concentrate their answers on the process of cognitive behaviour therapy.

Question 13

It was common in this question for students to score only 2 marks out of a possible total of 4. Common errors were to state that dreaming does not occur in non-REM sleep, or that heart rate and muscle tension decrease in REM sleep. Some students discussed features of sleep that are not mentioned in the question.

Question 14

Almost all students were able to provide an analysis of data from this graph.

Question 15

Equal numbers of students gained no marks, two marks, or the full four marks for this question. Marks were most commonly lost when students failed to make two clear, detailed, well-expressed points. It is important for students to appreciate the difference between medical and psychological interventions.

Question 16

This question produced a wide variety of answers. Most students seemed to understand that there is a relationship between optimal arousal level and the complexity of a task but became confused when trying to relate it to the scenario. Other students used rather general and everyday language in their answers.

Question 17

Nearly all students were able to describe a biological symptom of stress.

Question 18

Students who referred to circadian rhythm as a body clock showed little understanding of the notion that the circadian rhythm is a 24-hour biological cycle. Many students defined the circadian rhythm but struggled to give an example other than stating that the sleep/wake cycle is an example. Complete answers described the mechanisms of melatonin production and centres such as the SCN in the brain as regulators of the sleep/wake cycle over the 24-hour timespan.

Question 19

Most students described either Eysenck or the Big 5 theories of personality. If students were incorrect, it was usually because they had described either a psychodynamic theory or a humanistic theory.

Question 20

This question on Tamara and a humanistic theory of personality was most commonly answered using Maslow's hierarchy of needs, and this was generally explained well. Many students attempted to describe the entire hierarchy rather than focusing on one aspect and then did not go on to relate any of their answer to Tamara.

Question 21

Some students gave superficial answers to this question, having rote-learnt a response but not necessarily being able to explain the strength clearly. It was common for students to describe a feature of psychodynamic theory without talking about how it is a *strength* of the theory. The mean for this question was very low, indicating that students find it difficult to move beyond rote-learnt, perfunctory answers into more applied and evaluative responses.

Question 22

This question produced the lowest mean in the examination. Many students appeared not to realise that the essence of the question was the form of personality assessment. Instead, they read the question as asking the method of assessing a psychological response. Behavioural observation was the most common correct response.

Question 23

Although the second part of this question was answered well, many students clearly did not have an understanding of what assertiveness training is and how it works. Teachers should make sure that they focus on this explicitly in their teaching program.

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 24 and 25 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 24 and Question 25. 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 24

Responses to this question about Introduction to Psychology and Healthy Minds varied in quality, with a mean of 12.25 marks, or 61.26%.

Dot point one: 'Analyse the results to formulate one relevant conclusion'

The results presented gave rise to many possible conclusions and most students correctly identified one. Some students were able to read the graph, but not provide a conclusion in relation to the hypothesis. Others were able to formulate a conclusion, but had misread the data presented on the graphs.

Dot point two: 'factors that make this an experimental investigation design'

In general, students could answer this dot point. The most common error was to simply state factors without discussing their relevance to the experimental design. Another error was to discuss factors that were not exclusive to experiments.

Dot point three: symptoms of depression

Most students addressed this dot point correctly. Students whose answers were incorrect commonly listed the symptoms without describing them. Other students misread the question and went on to talk about how participating in the research could have contributed to depression.

Dot point four: two ethical issues

Responses to this dot point varied. Some students only stated the names of ethical issues. Others used debriefing, but were not able to convincingly apply this to the scenario. Some students incorrectly stated that the control group were deceived although this was not evident in the scenario.

Question 25

This question required students to describe and discuss different aspects of the Learning topic. It had a mean of 10.11 marks, or 60.53%.

Dot point one: observational learning

Students seemed confused over the factors that influence observational learning and some answers strayed towards descriptions of operant conditioning. For example, many students referred to observing the cake burning rather than observing the model on television. Some students stated the names of factors but did not discuss them in relation to Alice.

Dot point two: positive reinforcement

Under this dot point, some students gave a limited explanation of positive reinforcement; the use of a definition of the process would have been helpful. Many answers were brief descriptions of how Alice learns because her friends give her compliments without using any psychological terminology relevant to the process.

Dot point three: negative reinforcement

Negative reinforcement continues to be a concept that students find difficult to understand. It is often confused with punishment, such as Alice burning the cake in the scenario.

Dot point four: classical conditioning

This dot point produced a variety of responses, showing the range of understanding and articulation of the process of classical conditioning. Students need to fully explain the steps involved in pairing two stimuli and how this leads to a conditioned response. Some students described classical conditioning without relating their answer to Alice.

OPERATIONAL ADVICE

The presentation of samples was generally very helpful to moderators. Sets of student evidence be gathered together in a simple folder or clip; elaborate display folders tend to hinder the moderation process. Teachers are reminded to refer to packing instructions in the subject operational information for Psychology on the SACE website. If necessary they should complete:

- an addendum to the learning and assessment plan
- a Variations — Moderation Materials form, when there has been a breach of rules or assessed work is missing.

Teachers need to be careful to record their results correctly on the SACE school assessment results sheets as directed. These results will be used during the moderation process.

Learning and assessment plans are required from each assessment group. Teachers who present the same learning and assessment plan to multiple classes and undertake internal moderation are encouraged to submit results as a single assessment group.

Teachers should include all sets of work requested by the SACE Board. Samples are requested in order to provide moderators with representative work from multiple grade bands. When student work is not present, moderators are unable to confirm

the teacher's decisions. Teachers should only submit pieces of work that are part of that assessment decision (i.e. 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.

It was less helpful to moderators when schools presented samples with no notations, marks, grades, or other evidence of the teacher's assessment decisions. 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.

Electronic feedback made it difficult to distinguish between teachers' comments and students' work. Teachers should be careful not to suggest ideas and phrases that become part of the student's summative submission. The use of electronic editing for review of student work appeared to increase this risk.

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. Assessment decisions using weightings within assessment types (e.g. 5% for each test and 20% for assignments) are not required and were not as accurate as others, made against the performance standards.

Evidence presented against the performance standards for the knowledge and understanding criterion should be consistently broad and cover a range of psychological concepts to be awarded an A. The A grade level cannot be achieved by students in only one or two heavily weighted tasks; teachers should consider the entire body of work that each student presents for an assessment type and award the final grade as a reflection of the whole year's work in that type. Furthermore, teachers should ensure that the grade levels allocated on the sets of work match the grade levels on the school assessment results sheet (yellow).

GENERAL COMMENTS

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

It is recommended that teachers consider joining the online community for Psychology on the SACE website, 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.

Psychology
Chief Assessor