Psychology

2004 ASSESSMENT REPORT

Science Learning Area



PSYCHOLOGY

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GENERAL COMMENTS

This is the first year in which Psychology has been assessed as a SACE subject. In terms of mean scores, student achievement for the 2004 Psychology exam was commensurate with that for Biology in 2004. The mean score for the Psychology exam was 61.3%, which can be compared with the mean for Biology of 58.2%. The range of examination marks for Psychology was 14 to 114, out of a possible 120.

ASSESSMENT COMPONENT 1: COLLABORATIVE INVESTIGATION

ASSESSMENT COMPONENT 2: INDIVIDUAL INVESTIGATION

These two assessment components were centrally moderated. Schools were asked to submit a sample of the classes, investigations and a trained panel moderated the work.

The training of the whole panel was done by all members looking at several schools, taking notes and then discussing variations in marking standards. In this manner a common agreed standard was reached. The panel then split into two teams and completed the moderation.

One school was found to be too demanding in the marking of the data presentation and the marks were adjusted accordingly. Sixteen schools were found to be too generous and the marks were adjusted slightly.

Teachers are advised to ensure that students are familiar with the criteria for judging performance and the mandatory marks schemes which are published annually in the Science Learning Area Manual. It is also imperative that teachers heed the advice about conducting investigations published on the SSABSA website. Several moderators commented that it was difficult to assess the teachers' marking standard because the original proposal development was not included with the written report.

Several moderators commented that the advice given to students by teachers at the draft stage should include making sure that the question or hypothesis proposed is not too simplistic nor convoluted with several variables. Also advice needs to be given about constructing tables and graphs that summarise data.

It was pleasing to note that about 10% of the students chose to present a qualitative report and that these were well done.

ASSESSMENT COMPONENT 4: EXAMINATION

SECTION A: SHORT ANSWER QUESTIONS

In general, 2 marks are allocated for one well-expressed piece of information. Questions that require an explanation are worth 4 marks and therefore, in order to obtain full marks, students must supply two relevant and connected pieces of information.

The mean mark for Section A was 56.1% with a standard deviation of 14.4. The examination setters aimed to produce short-answer questions that varied in difficulty from straightforward, easily reproduced knowledge through to knowledge that required skills of critical understanding, problem-solving, and/or application of psychological principles. The mean mark for each question in Section A is shown in the table below.

Question	Mean Mark	Maximum Mark	Mean Mark (%)
1	0.65	2	32.74
2	4.18	6	69.59
3	2.37	4	59.23
4	2.96	4	73.89
5	3.07	4	76.70
6	2.21	4	55.36
7	2.66	4	66.50
8	4.57	6	76.13
9	2.07	4	51.83
10	3.04	4	75.89
11	2.09	4	52.21
12	1.91	6	31.77
13	1.16	2	57.82
14	2.03	4	50.68
15	1.92	4	48.04
16	1.45	2	72.62
17	3.40	6	56.75
18	4.55	6	75.91
19	3.40	4	84.99

Question 1

This question requiring a description of one disadvantage of quantitative investigations was one of the most poorly answered in Section A. Typically, responses to this question consisted of very broad statements that did not adequately convey the nature of the disadvantage involved. Several answers conveyed the idea that quantitative investigations could not 'get at opinions/attitudes'. Plainly, this point could be disputed by quantitative researchers in the fields of attitude and opinion surveying. Although it is possible to speculate that students were thinking along the correct lines with this type of response, such an answer does not adequately convey knowledge about a disadvantage of quantitative investigations. Responses that were framed in terms of the inability of such investigations typically to take into account either the unique characteristics of individual cases, or the differing contexts in which responses might occur in real-life, or to permit any form of qualification by respondents, would have conveyed a clearer sense of the specific disadvantage.

In general, then, answers to this question did not adequately explain the nature of the disadvantage involved. In a smaller number of cases, students identified factors that were more relevant disadvantages of *qualitative* investigations, whereas others provided an answer that would be considered an *advantage* of quantitative investigations.

Question 2

- (a) This part of the question was well answered, with the majority of students correctly calculating the mean for the given distribution of scores.
- (b) This part of the question concerning the median score of the distribution was also well done by the majority of students.

(c) Most students showed that they understood, in broad terms, what the concept of standard deviation was referring to when they compared the distributions of the two sets of scores. Those who did not receive full marks for this question typically omitted to mention the idea of dispersion *around the mean*.

Question 3

A minority of students answered this question by describing models of how attitudes are learned, or by listing factors affecting attitude formation, rather than describing a model of the *structure* of attitudes. Other responses to this question that did not receive full marks described a correct model of the structure of attitudes, but did not relate the description to the example provided in the question, as was explicitly requested.

Question 4

This question, requiring description of two actions that might influence the formation of positive attitudes, was generally well done. Responses that did not receive full marks often involved the statement of abstract ideas (for example, a general statement such as, 'the parents could teach their children to be compassionate') rather than descriptions of the *actions* that might be taken.

Question 5

This question requiring description of two factors that might increase the effectiveness of a television advertisement had one of the highest means in Section A. Where responses did not receive full marks, factors that would not have been possible to use in a *television* advertisement were often suggested.

Question 6

- (a) The majority of students answered this question about the bidirectional relationship between attitudes and behaviour correctly. Where full marks were not achieved, responses typically described only one direction of the bidirectional relationship, either in terms of one statement only (e.g., 'Attitudes can affect behaviours'), or in terms of two statements that conveyed the same meaning (e.g., 'Attitudes can affect behaviours, but behaviours can also be affected by attitudes').
- (b) This question, requiring the description of an example of a bidirectional relationship, was not very well answered in the majority of cases. Common errors involved providing an example of only one direction of the relationship, or responding with information about cognitive dissonance.

Question 7

Responses to this question about impression management varied widely in quality. Some responses involved very general descriptions of how the manager could impress the workers in his factory without providing sufficient specific information to receive full marks. Some responses contained a description of impression management but did not illustrate the answer with an example, or vice versa.

Question 8

- (a) Most students correctly identified the red bucket described in the scenario as the conditioned stimulus.
- (b) Most students correctly identified the horses' response of running to the gate as the conditioned response.

(c) This part of the question requiring the naming of the effect described in the scenario was somewhat less well done. Many students used the term 'discrimination' instead of 'stimulus discrimination' to describe the effect. A few students mis-identified the effect as the 'Garcia Effect' – an effect that relates to stimulus generalisation rather than to stimulus discrimination.

Question 9

This question required students to describe two factors that influence learning through observation. Bandura's Social Learning Theory provides four factors (attention, retention, reproduction and motivation/reinforcement) that could have been drawn upon in answering this question. Some responses did not describe specific factors in sufficient detail, mentioning concepts such as imitation, in general, or modelling, in general. Other responses were framed in terms of persuasion and attitude change factors (such as the 'source' and 'message'), rather than in terms of learning.

Ouestion 10

This question, requiring students to select the correct terms from a table of stimulus types, had one of the highest means in Section A. Responses to scenarios described in Parts (a) and (b) were done equally well.

Question 11

Responses to this question about the principles of operant conditioning varied in quality. It appeared that students who had read the question carefully were able to answer it appropriately. Other students did not address each of the specific aspects requested by the question. For example, some provided an appropriate example in their answer, but did not use the *correct terminology*, or they did not to draw on the *principles of operant conditioning*.

Question 12

This question about trait conceptions of personality had the lowest mean in Section A.

- (a) The best answers came from students who responded as required by the wording of the question: *Describe* one trait conception of personality. Many other students stated or listed components of a trait conception, but did not provide anything in the way of description.
- (b) Most students were able to describe a criticism of trait conceptions although, again, some answers were too brief to be comprehensible as a criticism.

Question 13

This question about qualitative methods of personality assessment was generally well done. Typical errors involved reference to 'focus groups' or IQ tests.

Question 14

Although most students were able to refer to appropriate forms of personality assessment, only the best answers contained *descriptions* that were of sufficient explanatory detail to receive full marks. For example, many students referred to projective tests of personality, but did not convey an adequate understanding of the typically unstructured or ambiguous nature of the stimuli involved, nor of the theory behind such forms of assessment – that an individual will project their own perceptions of the world onto the stimulus material, and that this can be interpreted by the tester.

Ouestion 15

This question, comparing humanistic with psychodynamic conceptions of personality, was not particularly well answered. Most students described one characteristic of each conception rather than describing two *differences* between humanistic and psychodynamic conceptions as required by the question. Such answers were not sufficient to achieve full marks.

Question 16

The majority of students were able correctly to answer this question about a distinguishing feature of REM sleep. A minority seemed confused about how REM sleep differs from other stages of the sleep cycle.

Question 17

- (a) Students' descriptions were sometimes too brief to indicate clear understanding of the ways in which particular disorders alter people's states of awareness. For example, many students referred to insomnia without describing its impact on daytime functioning.
- (b) Some responses described an intervention that might be used to treat the disorder that was not psychological in nature, despite this being explicitly requested in the question. Other responses offered little more than the names of therapies or interventions, the level of description being inadequate for the achievement of full marks for this question.

Question 18

- (a) This question about road accidents caused by driver fatigue was generally well answered, although a minority of responses stating when such accidents occurred were lacking in specificity.
- (b) Descriptions of strategies to reduce driver fatigue were also generally well done. The most common incorrect answers related to the use of loud music and open car windows.

Ouestion 19

This question requiring a description of strategies that could be used to manage stress had the highest mean in Section A. Responses that did not receive full marks typically involved naming of a strategy rather than its adequate description.

SECTION B: EXTENDED RESPONSE OUESTIONS

Each extended-response question was marked out of 20, with 16 marks being allocated for content (each well-made point being worth 2 marks) and 4 marks for communication. Both questions in this section of the examination had four content parts, each of which was marked out of 4.

In awarding a communication mark, the following factors were taken into account:

- Is the response structured in the form of fluent and well-organised sentences and paragraphs?
- Does the response contain correct grammar and spelling?
- Does the response clearly explain concepts using relevant and concise psychological language?

It was noted that some students wrote extended introductions for each of the two questions. Generally, such introductions contained points of information that were taken up in greater detail in subsequent paragraphs. This practice is not productive of time, as a point cannot receive marks more than once, regardless of how many times it is stated.

The overall mean for Section B was 59.1% with a standard deviation of 3.83.

Question 20

This question, requiring students to discuss symptoms of anxiety in terms of four levels of explanation of behaviour (biological, basic, person, and socio-cultural) had a mean mark of 56.9%.

The level of explanation that caused students the most difficulty was that of *basic processes*. Many students did not make the possible connection with universal processes of learning. Similarly, many students confused the basic process level with the person level of explanation. The biological and socio-cultural levels of explanation were much more adequately discussed in the majority of cases. Some responses did not involve a clear indication of which of the levels of explanation was being discussed at any particular point; rather, relevant information was presented in an unstructured, all-in-together, fashion.

A number of responses strayed from addressing the dot points set out in the question to focus on either (i) psychoanalysis of Harry, the character described in the scenario, or (ii) suggested treatments for his condition.

A few students used colloquialisms instead of appropriate psychological terminology in their responses (e.g., 'Harry is a worry-wart').

Question 21

This question, asking students to discuss ethical issues relevant to a detailed case study, had a mean of 62.8%.

Most students displayed a reasonable knowledge of at least two or three ethical issues that were directly relevant to the case study described in the question. Some students devoted proportionally greater space to discussing one or two issues and mentioned very little about others. The best responses were structured so as to separate the answer into discussion of four distinct ethical issues. By avoiding blurring of the distinctions between various ethical issues, students could develop more rounded, fuller, discussions. A hypothetical example that illustrates the disadvantages of the blurring or running-together of ethical issues in an answer can be seen below:

Milgram had to <u>debrief</u> his 'teachers' after the experiment [Issue1] because he didn't get their <u>informed consent</u> at the beginning of the experiment [Issue2] and needed to tell them that they were not really electrocuting the 'learners' (i.e., <u>causing harm</u>) during the experiment [Issue 3].

In this example, the student would typically forget to address Issue 1 at any greater length following a digression to elaborate on Issues 2 or 3.

Although it may not be possible to avoid some level of crossover in the discussion of relevant ethical issues, the better responses to this question displayed evidence of superior planning/structuring and communication skills.

A number of responses showed evidence of confusion between ethical issues and more general problems or limitations in the experimental design. The fact that participants were all males, that the sample was 'biased', or not reflective of the population at large, were all mentioned. Other responses mentioned relevant aspects of the case study but did not develop adequate discussions of how these aspects involved ethical considerations – the case of payment for participation being a typical case in point.

A small number of responses involved students recalling their knowledge of ethical issues, or discussing the general philosophy underlying ethics in psychological research, without relating the answer to the case study in question. Some drifted even further from the set question by referring to other studies, including those that involved the use of animals.

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