



Units 3 and 4 Psychology

Practice Exam Solutions

Stop!

Don't look at these solutions until you have attempted the exam.

Any questions?

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Section A – Multiple-choice questions

Question 1

The correct answer is D.

Question 2

The correct answer is A.

Question 3

The correct answer is D.

Question 4

The correct answer is C.

Question 5

The correct answer is B.

Question 6

The correct answer is C.

Question 7

The correct answer is D.

Question 8

The correct answer is B.

Question 9

The correct answer is B.

Question 10

The correct answer is A.

Question 11

The correct answer is A.

Question 12

The correct answer is B.

Question 13

The correct answer is A.

Question 14

The correct answer is B.

Question 15

The correct answer is C.

Question 16

The correct answer is C.

Question 17

The correct answer is B.

Question 18

The correct answer is D.

Question 19

The correct answer is B.

Question 20

The correct answer is B.

Question 21

The correct answer is D.

Question 22

The correct answer is A.

Question 23

The correct answer is D.

Question 24

The correct answer is B.

Question 25

The correct answer is D.

Question 26

The correct answer is B.

Question 27

The correct answer is A.

Question 28

The correct answer is B.

Question 29

The correct answer is D.

Question 30

The correct answer is A.

Question 31

The correct answer is A.

Question 32

The correct answer is A.

Question 33

The correct answer is D.

Question 34

The correct answer is A.

Question 35

The correct answer is C.

Question 36

The correct answer is B.

Question 37

The correct answer is D.

Question 38

The correct answer is B.

Question 39

The correct answer is C.

Question 40

The correct answer is C.

Question 41

The correct answer is B.

Question 42

The correct answer is B.

Question 43

The correct answer is C.

Question 44

The correct answer is A.

Question 45

The correct answer is D.

Question 46

The correct answer is B.

Question 47

The correct answer is C.

Question 48

The correct answer is D.

Question 49

The correct answer is C.

Question 50

The correct answer is B.

Question 51

The correct answer is A.

Question 52

The correct answer is A.

Question 53

The correct answer is B.

Question 54

The correct answer is D.

Question 55

The correct answer is A.

Question 56

The correct answer is A.

Question 57

The correct answer is C.

Question 58

The correct answer is D.

Question 59

The correct answer is A.

Question 60

The correct answer is D.

Question 61

The correct answer is B.

Question 62

The correct answer is A.

Question 63

The correct answer is C.

Question 64

The correct answer is D.

Question 65

The correct answer is B.

Section B – Short-answer questions

Marks allocated are indicated by a number in square brackets, for example, [1] indicates that the line is worth one mark.

Question 1

Students are required to describe the difference between Normal Waking Consciousness (NWC) and Altered States of Consciousness (ASC) in terms of time orientation. Students are also required to describe the difference between NWC and ASC in terms of content limitations.

Mark allocation:

- Accurate description of the difference between NWC and ASC in terms of time orientation: 2 marks
- Accurate description of the difference between NWC and ASC in terms of content limitations: 2 marks

Sample response:

Time orientation: those in Normal Waking Consciousness (NWC) are likely to have a structured and logical sense of time, including the past, present and future. [1] Comparatively, those in an Altered State of Consciousness (ASC) may have difficulty in logically ordering or perceiving time; senses of the past, present and future may be distorted, further to distortions in perception of time length. [1]

Content limitations: in NWC, an individual is likely to have very controlled content limitations. That is, they are capable of filtering and selecting various stimuli to focus on, and are capable of ignoring other stimuli (or holding it to be processed at a later time). [1] Comparatively, in ASC, content limitations are not as regulated. That is, an individual may be incapable of filtering stimuli to only focus on one particular stimulus. [1]

Question 2a

Students are required to explain why a six-year-old may find it easier to learn a second language than a forty-year-old in terms of brain plasticity.

Mark allocation:

- 1 mark for identifying the role of *developmental* plasticity
- 1 mark for explaining the neural basis of learning with direct reference to the case study

Sample answer:

The difference in ease of learning a second language between Sammy (a six-year-old) and Susie (a forty-year-old) may be due to developmental plasticity. That is, Sammy is in the 'sensitive period,' whereby his brain's neural connections are open to change, whereas Susie is not. [1]

Developmental plasticity suggests that when we are young, our brain is most open to change. Thus, Sammy's brain has a greater chance of changing in order to learn a second language more efficiently than Susie's brain. In this case, it would be easier for Sammy's brain to form new neural pathways between pre-synaptic and post-synaptic neurons, meaning that he could more easily learn new vocabulary, sentence structure etc. of Indonesian. Comparatively, Susie's brain is already largely developed, making it more difficult to form new neural pathways. [1]

Question 2b

Students are required to name and explain the process that Susie is using to intentionally forget an embarrassing incident.

Mark allocation:

- 1 mark for correct identification of *suppression*
- 1 mark for explaining how Susie may have used suppression to forget the incident

Sample answer:

Susie is using suppression to forget the embarrassing incident. [1] Suppression refers to the conscious process of blocking out negative memories. In Susie's case, she may have consciously chosen to ignore the embarrassing memory of falling over on national television, or may even refuse to acknowledge that those memories are real. [1]

Question 3

Students are required to accurately describe two major functions of the amygdala.

Mark allocation:

- 1 mark per accurate and relevant description, for a total of 2 marks

Functions of the amygdala include but are not limited to:

- Connecting memories with emotions
- Fear conditioning
- Key role in fear, excitement and arousal
- Allows memories of feelings
- Survival mechanism (through the acknowledgement of fear)

Sample answer:

1. *The amygdala plays a key role in connecting memories with emotions. In doing so, the amygdala works in conjunction with the hippocampus; the hippocampus allows us to remember particular things, whilst the amygdala allows us to remember how we felt about those things, or at a particular time. That is, the amygdala is responsible for associating feelings with memories. [1]*
2. *As such, the amygdala can be used as a survival mechanism. For example, most people would feel threatened by or fearful of a wild tiger – and with good reason – but this is only the case because the amygdala has associated fear with the pre-existing memory of tigers. Without the amygdala functioning effectively, we would be much more likely to run into danger more often (due to such a retarded fear/danger response). [1]*

Question 4a

Students are required to accurately explain the repeated-measures experimental design.

Mark allocation:

- 1 mark per relevant point explaining the repeated-measures experimental design, for a total of 2 marks

Features of the repeated-measures experimental design include but are not limited to:

- All participants are exposed to both the research and experimental conditions (control and experimental groups)
- There is a reduced likelihood of participant effects
- There is an increased likelihood of order effects

Sample answer:

Repeated-measures is an experimental design in which the same participants are used as both the experimental and control groups. That is, all participants are exposed to both the research and experimental conditions. [1] As the same participants are used for both groups/conditions, the likelihood of participant effects starkly reduces. However, the likelihood of order effects greatly increases. Typically, in order to reduce such an effect, the sample will be split in half, with one half being exposed to the experimental condition before the research condition, and the other half being exposed to the research condition before the experimental condition. This is called counterbalancing. [1]

Question 4b

Students are required to accurately identify one advantage of the independent groups experimental design. Students are also required to accurately identify one disadvantage of the same design.

Mark allocation:

- Accurate advantage of the independent groups experimental design: 1 mark
- Accurate disadvantage of the independent groups experimental design: 1 mark

Advantages of the independent groups experimental design include but are not limited to:

- Typically quicker than using a matched-participants or repeated-measures design
- No chance of order effects

Disadvantages of the independent groups experimental design include but are not limited to:

- Highly vulnerable to participant effects
- Results are unlikely to be as representative of the wider population as the using a matched-participants design

Question 5a

Students are required to accurately identify which branch of the autonomic nervous system is likely to be most active.

Mark allocation:

- 1 mark for accurately identifying the sympathetic nervous system

Question 5b

Students are required to accurately identify two physiological changes which are likely to come about as a result of the sympathetic nervous system being activated.

Mark allocation:

- 1 mark per identification of a relevant physiological change, for a total of 2 marks

Physiological changes that are likely to occur as a result of the activation of the sympathetic nervous system include but are not limited to:

- Increased heart rate
- Increased perspiration
- Increased respiration rate
- Inhibited digestion
- Loosening of bladder
- Dilation of pupils
- Dry mouth
- Release of adrenaline

Question 5c

Students are required to explain how Sally's fear of moths may be extinguished by use of classical conditioning.

Mark allocation:

- 1 mark for identifying that the conditioned stimulus needs to be presented without association with the unconditioned stimulus
- 1 mark for stating that the conditioned response will reduce in time due to the above

Sample response:

For Sally's fear of moths to be 'reversed,' the conditioned stimulus (the moth) needs to be consistently presented to Sally without association of the unconditioned stimulus (being hit in the head with a baseball).

[1] Each time Sally is exposed to a moth without being hit in the head with a baseball, the conditioned response (fear due to the moth) will be reduced. Over time, Sally's fear of moths may be entirely extinguished. [1]

Question 5d

Students are required to explain why Sally may also be irrationally fearful of dragonflies, in terms of classical conditioning.

Mark allocation:

- 1 mark for identifying that stimulus generalisation has occurred
- 1 mark for explaining stimulus generalisation with explicit reference to Sally's case

Sample response:

Sally may also be irrationally fearful of dragonflies due to stimulus generalisation. In stimulus generalisation, stimuli which are similar to the conditioned stimulus (moths), but are not the conditioned stimulus (e.g., dragonflies) come to elicit the conditioned response (in Sally's case, fear).

Question 6

Students are required to accurately explain the difference between mental health and mental illness.

Mark allocation:

- 1 mark per relevant difference between mental health and mental illness, for a total of 2 marks

Differences between mental health and mental illness include but are not limited to:

- Mental illness negatively impacts wellbeing, whereas mental health refers to a level of wellbeing
- Mental illness tend to be long-term, whereas mental health is fluid
- Mental illnesses are significant burdens on everyday functioning, whereas mental health can be good or bad
- Only some people experience mental illnesses, whereas all people experience mental health (to varying degrees)

Question 7

Students are required to identify and explain one advantage of Lazarus & Folkman's Transactional Model of Stress and Coping.

Mark allocation:

- 1 mark for the identification of a relevant advantage
- 1 mark for an explanation of the aforementioned advantage

Advantages of Lazarus & Folkman's Transactional Model of Stress and Coping include but are not limited to:

- It accounts for a psychological approach to stress, whereas other models focus mainly on the physiological approach
- It accounts for the individual's emotions during particular situations
- Includes numerous stages (i.e. primary appraisal, secondary appraisal and re-appraisal to account for a comprehensive overview of a stressful situation and how it should be dealt which)

Sample response:

Accounts for a psychological approach: [1] *Lazarus & Folkman's Transactional Model of Stress and Coping emphasises the importance of psychological determinants in a) identifying stress, and b) identifying how to deal with stress. This is a significant advantage over other models of stress which do not emphasise the importance of psychological determinants, as, despite stress being likely to result in physiological changes, stress itself (both eustress and distress) is a psychological phenomenon.* [1]

Question 8a

Students are required to accurately identify the stage of sleep in which sleep spindles are most likely to occur.

Mark allocation:

- 1 mark for the identification of Stage 2 NREM sleep

Question 8b

Students are required to name one phenomenon other than sleep spindles likely to occur in Stage 2 NREM sleep. Students are also required to describe the chosen phenomenon.

Mark allocation:

- 1 mark for the identification of k-complexes
- 1 mark for identifying that k-complexes are single bursts of a high-amplitude brain wave

Question 9a

Students are required to accurately identify one of the four strategies for coping with stress outlined in the study design.

Mark allocation:

- 1 mark for the correct identification of biofeedback, meditation/relaxation, physical exercise or social support

Question 9b

Students are required to outline the strategy for coping with stress chosen in Question 9.a. Students are also required to explain how the strategy they chose in Question 9a may alleviate stress.

Mark allocation:

- 1 mark for an accurate description of the chosen strategy
- 1 mark for an explanation of how that strategy may help the individual to cope with stress

Sample answer:

Biofeedback *refers to the use of principles of operant conditioning in conjunction with scientific equipment in order to manually adapt physiological processes, and reduce stress.* [1] *Scientific equipment is used to measure the individual's physiological responses (including heart rate, galvanic skin response etc.). Then, the individual is encouraged and taught how to modify their own physiological processes – thus reducing stress – by modifying their thoughts.* [1]

Question 10

Students are required to outline the difference between the dimensional and categorical approaches to classifying mental conditions and disorders. Students are also required to identify one advantage of the dimensional approach, and one limitation of the dimensional approach.

Mark allocation:

- 2 marks for outlining the difference between the dimensional and categorical approaches
- 1 mark for the identification of a relevant advantage of the dimensional approach
- 1 mark for the identification of a relevant limitation of the dimensional approach

Sample answer:

The categorical approach uses discrete, distinct categories and sub-categories to order mental conditions and disorders. It is 'all or nothing'; you either suffer from a particular mental illness, or you do not. The categorical approach utilises diagnostic tools such as the DSM-IV and ICD-10. [1]

Comparatively, the dimensional approach uses scales and continuums to diagnose conditions, quantifying symptoms so that they can be analysed. [1]

One advantage of the dimensional approach is that it allows for unique combinations of mental conditions and, therefore, tends to avoid labelling and stigma. That is, you are not classified as either suffering from a mental condition or not suffering from a mental condition, as you are in the categorical approach. [1]

One limitation of the dimensional approach is that diagnosis can be very time-consuming; as there are infinite possible combinations of illnesses, diagnosis may be more difficult than in the categorical approach (where you either suffer from a particular condition, or you don't, with nothing in between). [1]

Question 11

Students are required to accurately explain the difference between continuous reinforcement and partial reinforcement.

Mark allocation:

- 1 mark for an accurate description of the difference between continuous reinforcement and partial reinforcement
- 1 mark for the use of relevant examples

Sample answer:

Continuous reinforcement is the simplest schedule of reinforcement. It involves reinforcing a particular action every single time that action is displayed. For example, a child may be positively reinforced with a sticker each and every time they remember to brush their teeth before going to bed. [1]

Comparatively, partial reinforcement does not reinforce the desired action every time that action is displayed. There are numerous types of partial reinforcement, including fixed interval, fixed ratio, variable interval and variable ratio. In all of these schedules, reinforcement is provided after a set time (or varied times based on an average time) or after a set number of desired actions (or a varied number based on an average number). For example, in the fixed interval schedule, reinforcement is provided after a set period of time, assuming that the desired behaviour has been displayed at least once. For example, a part-time waitress may be paid \$15 for every hour that she works. [1]

Question 12

Students are required to explain how spontaneous recovery may occur in operant conditioning. Students are also required to explain how spontaneous recovery may occur in classical conditioning

Mark allocation:

- 1 mark for explaining how spontaneous recovery may occur in operant conditioning
- 1 mark for using a relevant example to demonstrate the above
- 1 mark for explaining how spontaneous recovery may occur in classical conditioning
- 1 mark for using a relevant example to demonstrate the above

Sample answer:

In classical conditioning, spontaneous recovery may occur if the neutral stimulus and the unconditioned stimulus are associated again to form the conditioned stimulus (which elicits the conditioned response) after a period of rest. [1] For example, a dog may salivate (the elicited conditioned response) due to the ringing of a bell (the neutral stimulus) as it has been associated with food (the unconditioned stimulus) to form the conditioned stimulus.

Comparatively, spontaneous recovery may occur in operant conditioning if a behaviour is 're-learned' after a period of rest. That is, a particular behaviour becomes reinforced once again. As this response has been learned before, the 're-learning' process is likely to be much shorter than the initial learning process. [1] For example, a student may re-learn to get to class early if they are positively reinforced with chocolate, after a period where they were not rewarded for doing so. [1]

Question 13a

Students are required to accurately explain narrative chaining.

Mark allocation:

- 1 mark for an accurate explanation

Sample answer:

Narrative chaining is a mnemonic device which can be used to improve memory. In narrative chaining, words, concepts or ideas are combined into one story. The idea is that the context of the story should act as a cue to remembering each piece of information. As such, it relies on the principles of elaborate rehearsal; as the information is encoded semantically (i.e. it requires knowledge of the word's meaning to make sense in the story), which is the deepest level of encoding, the stimuli should be remembered more effectively and efficiently.

Question 13b

Students are required to explain how Ivan could use narrative chaining to aid his memory of six unrelated words.

Mark allocation:

- 1 mark for an accurate explanation

Sample answer:

Ivan could use narrative chaining to make a story out of the six semantically-unrelated words. This should improve Ivan's memory of the words, because they now have semantic context and are therefore encoded semantically (which is a deeper level than trying to encode the words, say, phonemically or visually). For example, Ivan could make the story: "The monkey lived in a house that was blue. It loved bananas – it thought they were great – but hated fish." [1]

Question 14a

Students are required to accurately identify which type of behaviour not dependent on learning is exemplified by a spider spinning a web.

Mark allocation:

- 1 mark for the identification of fixed action pattern

Question 14b

In reference to Question 14.a, students are required to explain why humans do not demonstrate the behaviour of spinning webs.

Mark allocation:

- 1 mark for an accurate explanation of fixed action patterns
- 1 mark for explicitly relating fixed action patterns to the example of spiders and humans, in order to explain why only spiders spin webs

Sample answer:

*Fixed action patterns are inherent predispositions of a particular species to behave in a certain way. [1]
Spiders have an inherent predisposition to spin webs, largely as a survival mechanism (in order to catch prey). Comparatively, humans do not depend on such a behaviour for survival; ergo, spiders spin webs, but humans do not. [1]*

Question 15a

Students are required to identify the technique of data research collection that has been used in the case study.

Mark allocation:

- 1 mark for identifying the self-report method

Question 15b

Students are required to explain a potential limitation of the self-report method. Students are also required to discuss the potential effect the aforementioned limitation may have on the results of the research.

Mark allocation:

- 1 mark for identifying a relevant limitation of the self-report method
- 1 mark for explaining the aforementioned limitation
- 2 marks for relevant discussion regarding the effect that the aforementioned limitation may have on the results of the research study

Limitations of the self-report method include but are not limited to:

- Results are extremely subjective
- Results are open to bias
- Results depend on the reliability of the individual participants
- There are limited measures to ensure that the self-report data is accurate

Sample answer:

One limitation of the self-report method is that results are extremely subjective. [1] That is, as the participants of the study are required to merely state how they feel, there is no conclusive way of comparing results of one participant with another (two participants may be feeling similarly tired, but due to context or personal circumstances, one may say that they are "very tired" whilst the other may say they feel "moderately tired"). [1]

This limitation could have rather drastic consequences for the results of the research study, as it could skew the data. [1] For example, the research study may find that extremely tired students perform more favourably in Year 12 than moderately tired students, but only due to the subjectivity of the self-report method. That is, it may appear that extremely tired students perform well, but only because students who are not objectively tired have subjectively labelled themselves as such. [1]

Question 16

Students are required to accurately describe two features of Hermann Ebbinghaus' 'forgetting curve.'

Mark allocation:

- 1 mark per relevant feature, for a total of 2 marks

Relevant features of Ebbinghaus' 'forgetting curve' include but are not limited to:

- Most information is forgotten in the initial period of learning
- There is a particularly steep rate of memory loss in the initial 20 minutes
- After about one hour, the majority of information that had been learned is forgotten
- After the initial hour, forgetting occurs at a much slower, but generally consistent, rate
- Ebbinghaus proposed that his 'forgetting curve' would be similar for all individuals
- Ebbinghaus proposed that his 'forgetting curve' would be similar regardless of the complexity of the information learned

Question 17

Students are required to choose and accurately describe two ethical principles.

Mark allocation:

- 1 mark per identification of a relevant ethical principle, for a total of 2 marks
- 1 mark per accurate description of the chosen ethical principle, for a total of 2 marks

Acceptable ethical principles include:

- Participants' rights
- Confidentiality
- Voluntary participation
- Withdrawal rights
- Informed consent
- Deception
- Debriefing
- Beneficence
- Justice
- Respect for persons
- Integrity

Sample answer:

Withdrawal rights: [1]

Participants should be free to participate, withdraw from, decline participation in, or withdraw their results from a study at any time with no (threat of) negative consequences. Experimenters should inform all participants of this right and the nature of the study before it commences. [1]

Question 18

Students are required to identify two features of the semantic network theory. Students are also required to use examples relating to learning theories in the Psychology 3/4 course to exemplify the aforementioned features.

Mark allocation:

- 1 mark per identification of relevant feature of the semantic network theory, for a total of 2 marks
- 1 mark for the use of relevant examples relating to learning theories (including classical conditioning, operant conditioning, observational learning etc.)

Features of the semantic network theory that allow for more effective and efficient recall of information include but are not limited to:

- Hierarchical structure: there are different 'levels' of information
- Nodes: specific pieces of information
- Links: physical lines/mental pathways that connect nodes to show their relationship

Sample answer:

A semantic network is made up of nodes [1] and a hierarchical structure. [1] Nodes refer to individual pieces of information. For example, in a semantic network theory relating to classical conditioning, nodes may include things like 'classical conditioning,' 'processes,' 'experimenters' and 'past research.' Not all of these nodes will be on the same 'level,' as they are not of equal importance; 'classical conditioning' is an umbrella node of 'processes,' 'experimenters' and 'past research,' which all refer to classical conditioning. Indeed, each of these nodes will have nodes 'below' them, too. For example, 'experimenters' may encompass subsequent nodes of 'John Watson' and 'Ivan Pavlov,' whilst 'processes' may include nodes like 'acquisition,' 'extinction' and 'stimulus generalisation.' These nodes are organised in a hierarchical structure, whereby the most general nodes (i.e. 'classical conditioning') are at the top, and each level below implies a new level of specificity.

Section C – Extended response

Question 1a

Students are required to identify the sampling technique used in the case study.

Mark allocation:

- 1 mark for identification of *convenience sampling*

Question 1b

Students are required to identify one ethical principle and explain how that ethical principle was infringed in the case study.

Mark allocation:

- 1 mark for accurate explanation of ethical principle in direct relation to the case study

Acceptable ethical principles include:

- Participants' rights
- Confidentiality
- Voluntary participation
- Withdrawal rights
- Informed consent
- Deception
- Debriefing
- Beneficence
- Justice
- Respect for persons
- Integrity

Sample answer:

The ethical principle of participants' rights was violated in the case study. The principle of participants' rights suggests that participants should not be subjected to psychological or physiological harm as a result of the research. It is likely that participants in the experimental group, whom were required to drink excess amounts of alcohol for three consecutive weeks, would have been physiologically harmed by the process. As there was a double-blind procedure in place, the experimental group would not have known that they were drinking excess amounts of alcohol (particularly as they were not fully informed of the nature of the study, which also violates the ethical principle of informed consent). [1]

Question 1c

Students are required to construct a research hypothesis in relation to the case study.

Mark allocation:

- 1 mark for including a testable, positive prediction
- 1 mark for including the research sample

Sample answer:

It is predicted that, in a population of 100 students aged 13-18 inclusive, those who consume excess amounts of alcohol daily will have lower levels of anxiety before performing a five-minute oral presentation in front of a large number of peers, compared to those who do not consume excess amounts of alcohol.

Question 1d

Students are required to identify the operationalised dependent variable in relation to the case study.

Mark allocation:

- 1 mark for identifying the dependent variable and how it will be tested

Sample answer:

The operationalised dependent variable is the teenage students' levels of anxiety before performing a five-minute oral presentation to a large number of peers, measured by a number of self-report questionnaires.

Question 2

Students are required to write a possible research hypothesis and method section for a study on the impact of undertaking VCE Psychology on overall VCE studies. Students are required to: write a research hypothesis; discuss the participants by identifying the chosen sampling procedure; identify the operationalised independent variable; identify the operationalised dependent variable; discuss the procedure of the study by identifying the experimental research design of the study; discuss the possible impact of an extraneous variable in the study; identify how the impact of that potential extraneous variables could be managed and, ultimately, avoided in the future; and identify one ethical principle which should be adhered to during the study. Students are also required to adhere to the conventions of psychological report writing.

Mark allocation:

- 1 mark for identifying a relevant research hypothesis
- 1 marks for identifying the participants of the study
- 1 mark for identifying the chosen sampling procedure
- 2 marks for identifying the operationalised independent and dependent variables (1 mark for the operationalised independent variable; 1 mark for the operationalised dependent variable)
- 1 mark for identifying the chosen type of experimental research design
- 2 marks for discussing potential extraneous variables (1 mark for identifying a potential extraneous variable; 1 mark for identifying a method of avoiding the impact of that extraneous variable in the future)
- 1 mark for identifying one ethical principle which should be adhered to during the study
- 1 mark for adhering to the conventions of psychological report writing

Sample answer:

Research hypothesis

It is hypothesized that, in a population of 1000 Year 12 students in Victorian public and private schools, those who undertake VCE Psychology will attain a greater ATAR than those who do not. [1]

Method [1 – adhering to conventions of psychological report writing]**Participants**

Participants of the study are 1000 volunteer Year 12 students. [1] A convenience sampling technique was used; the first 1000 students to sign up for the study were accepted, regardless of whether or not they were undertaking VCE Psychology. [1]

Procedure

The independent variable of the study is undertaking VCE Psychology or not, measured by whether the individual completes VCE Psychology Units 3/4. [1] The dependent variable of the study is the student's overall VCE performance, measured by their ATAR (Australian Tertiary Admission Rank). [1]

An independent groups experimental research design was used, meaning that participants were allocated to either the control group (those not undertaking VCE Psychology) or the experimental group (those undertaking VCE Psychology). [1]

Discussion***Limitations***

A possible extraneous variable in the study is gender; some gender(s) may outperform other gender(s) irrespective of whether or not they undertake VCE Psychology. This is a factor other than the independent variable that could impact the dependent variable (overall performance in VCE) and, therefore, may skew the results. [1]

In the future, this extraneous variable could be avoided by using a random stratified sampling technique rather than a convenience sampling technique. This would mean that the control and experimental groups would have a proportionate number of males and females who undertook VCE Psychology to the wider population. [1]

Ethical principles

Informed consent is one ethical principle which would need to be adhered to during the study. As some participants may be under the age of 18, informed consent from a parent or guardian may be required. Before taking part in the study, participants (or their parents/guardians) should be made aware of the purpose and nature of the study, and their probable role. [1]