



SAMPLE ASSESSMENT TASKS

PSYCHOLOGY
ATAR YEAR 12

Acknowledgement of Country

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Sample assessment task

Psychology – ATAR Year 12

Task 2 – Unit 3 – Memory – Remembering and forgetting

Assessment type	Science inquiry (Research)
Conditions	
Part A: Research	Two hours of class time
Part B: In-class component	Five minutes reading time 55 minutes working time Supervised in class with notes allowed
Task weighting	8% of the school mark for this pair of units

Memory –Remembering and forgetting research project (54 marks)

Analyse and evaluate the Craik and Tulving (1975) study and another piece of contemporary research on remembering and forgetting.

Part A (5 marks)

Collate a set of research notes in the form of dot points, using key words and phrases only, and a reference list that you will submit on completion of Part B.

- State the aim, method and key findings for Craik and Tulving (1975) and for a piece of contemporary research on remembering and forgetting.
- Submit no more than one A4 page and only contain the information above – no analysis and evaluation of sample, method or findings.

Submit one page of notes (using key words and phrases only) to authenticate your work. No marks are awarded for the notes.

Provide a reference list, using an appropriate citation style, for all sources used for this assessment. Marks are awarded for the reference list.

Part B**(49 marks)**

Write detailed answers to the following questions.

1. Craik and Tulving (1975) conducted a study to investigate the impact of levels of processing on memory recall.

(a) Complete the table below to demonstrate your understanding of the levels of processing.

(7 marks)

Level	Form	Description	Example from Craik and Tulving (1975)
Shallow		We only encode the physical properties	
	Phonemic		
Deep			

(b) Create a directional hypothesis for Craik and Tulving (1975).

(2 marks)

(c) Using the key findings, form an evidence-based conclusion for this study.

(4 marks)

(d) Explain a limitation of Craik and Tulving in terms of ethics and suggest how this should have been addressed. (4 marks)

2. (a) State the aim of the contemporary study you have researched. (1 mark)

(b) (i) Identify the research design used in the study. (1 mark)

(ii) Explain the key features of this research design and apply them to the study. (4 marks)

(iii) Evaluate this research design. (2 marks)

Strength: _____

Limitation: _____

- 3. Lustig and Hasher (2001) investigated whether implicit memory could be impacted by interference. Their sample consisted of 146 university students who were randomly placed into groups.

Participants were first shown a list of words, which were presented individually on screen. Participants were not aware that the words were divided into non-target words and target words. Depending on whether the participants were in the control or experimental group, non-target words were either similar or unrelated to the target words.

After completing a series of distractor tasks, participants undertook a fragment completion test to measure whether they implicitly remembered the target words. This consisted of words with missing letters, e.g. T_RG_T.

Participants who saw unrelated non-target words completed more of the fragments using the target words compared to those who saw similar non-target words.

- (a) Assess which type of interference Lustig and Hasher were investigating. (3 marks)

- (b) Prior to analysis, the researchers removed data from 40 participants who had indicated that they were aware of the true purpose of the experiment and the concepts it was measuring. Explain why the researchers removed this data. (3 marks)

- (c) (i) Outline the sampling technique used in this study. (2 marks)

- (ii) Discuss how this sampling technique may impact validity and assess whether the results can be generalised. (5 marks)

4. Porsteinsson et al (2008) investigated the effectiveness of a medication called Memantine in the treatment of Alzheimer's disease. Their sample consisted of participants with moderate to severe Alzheimer's disease who were also receiving cholinesterase inhibitor (ChEI) treatment.

A computer assigned participants to either the experimental group or the control group, and participants weren't informed which group they'd been assigned to. Participants in the experimental group were given a daily extended release 28 mg tablet of Memantine and participants in the experimental group were given a placebo.

Data was collected using the Clinician's Interview Based Impression of Change – Plus, a measure which uses rating scales and semi-structured interviews.

- (a) State two impacts of Alzheimer's disease on behaviour and emotion. (2 marks)

One: _____

Two: _____

(b) (i) Describe the data collection technique used in this study. (3 marks)

(ii) Evaluate this method of data collection. (2 marks)

Strength: _____

Limitation: _____

(c) Outline one way this study was designed to minimise the effects of extraneous and confounding variables. (4 marks)

Marking key for sample assessment task 2 – Unit 3

Part A (5 marks)

Provides a correctly formatted reference list. (5 marks)

Description	Marks
Provides reference list	1
Subtotal	/1
Includes all required information	2
Includes some required information	1
Subtotal	/2
Uses correct format	2
Mostly uses correct format	1
Subtotal	/2
Total	/5

Part B (49 marks)

1. Craik and Tulving (1975) conducted a study to investigate the impact of levels of processing on memory recall.

(a) Complete the table below to demonstrate your understanding of the levels of processing.

(7 marks)

Level	Form	Description	Example from Craik and Tulving (1975)
Shallow	Structural (1)	We only encode the physical properties	Is the word in capital letters or small letters? (Accept any other example from their research) (1)
	Phonemic	We encode the sound (1)	Does the word rhyme with ...? (Accept any other example from their research) (1)
Deep	Semantic (1)	We encode the meaning (1)	Does the word go in this sentence ...? (Accept any other example from their research) (1)
Total			/7

(b) Create a directional hypothesis for Craik and Tulving (1975).

(2 marks)

Description	Marks
Includes the independent variable	1
Includes the effect on the dependent variable	1
Total	/2
Answers may include but are not limited to:	
Deep processing will lead to more detailed recall than shallow processing.	

(c) Using the key findings, form an evidence-based conclusion for this study. (4 marks)

Description	Marks
States clearly whether hypothesis or inquiry question was supported/not supported	1
Subtotal	/1
Supports conclusion with a wide range of relevant evidence from the data collected	3
Supports conclusion with relevant evidence from the data collected	2
Supports conclusion with brief references to evidence from the data collected	1
Subtotal	/3
Total	/4

(d) Explain a limitation of Craik and Tulving in terms of ethics and suggest how this should have been addressed. (4 marks)

Description	Marks
Deception	1
Participants were not informed of the true purpose of the study; instead, they were told it was a test of perception	1
They should have been debriefed afterwards	1
In the debrief, the experimenters should have told them the true purpose of the experiment and why they'd been deceived	1
Total	/4

2. (a) State the aim of the contemporary study you have researched. (1 mark)

Description	Marks
Correctly states the aim	1
Total	/1

(b) (i) Identify the research design used in the study. (1 mark)

Description	Marks
Correctly identifies the research design	1
Total	/1

(ii) Explain the key features of this research design and apply them to the study. (4 marks)

Description	Marks
Clearly describes the key features of the identified research design	2
Broadly outlines the key features of the identified research design	1
Subtotal	/2
Explicitly links example/s from chosen study back to the key features of the research design	2
States example/s from chosen study with minimal links back to the key features	1
Subtotal	/2
Total	/4

(iii) Evaluate this research design. (2 marks)

Description	Marks
Correctly states a strength	1
Correctly states a limitation	1
Total	/2

3. Lustig and Hasher (2001) investigated whether implicit memory could be impacted by interference.

(a) Assess which type of interference Lustig and Hasher were investigating. (3 marks)

Description	Marks
Proactive (interference)	1
where old information prevents the recall of new information	1
The similar non-target words in the experimental condition prevent the recall of the target words	1
Total	/3

(b) Prior to analysis, the researchers removed data from 40 participants who had indicated that they were aware of the true purpose of the experiment and the concepts it was measuring. Explain why the researchers removed this data. (3 marks)

Description	Marks
To remove demand characteristics	1
Demand characteristics are cues that participants pick up on that suggest the true purpose of the study/what results the researcher expects from the study	1
This could potentially affect the data as participants may change their behaviour to support the hypothesis	1
Total	/3

(c) (i) Outline the sampling technique used in this study. (2 marks)

Description	Marks
Convenience sampling	1
A sample that consists of people who are readily available to the researcher	1
Total	/2

(ii) Discuss how this sampling technique may impact validity and assess whether the results can be generalised. (5 marks)

Description	Marks
For results to be generalised: <ul style="list-style-type: none"> the sample needs to be representative of the population (1) extraneous and potential confounding variables must be controlled (1) measures must be reliable and valid (1) 	3
Convenience samples may lack external validity as they may not be representative (1); therefore, the results cannot be generalised (1)	2
Total	/5

4. Porsteinsson et al (2008) investigated the effectiveness of a medication called Memantine in the treatment of Alzheimer's disease.

(a) State two impacts of Alzheimer's disease on behaviour and emotion. (2 marks)

Description	Marks
Any two of: <ul style="list-style-type: none"> irritability agitation apathy loss of social inhibition aggression 	1–2
Total	/2
Accept other relevant answers.	

(b) (i) Describe the data collection technique used in this study. (3 marks)

Description	Marks
Mixed methods design	1
It collected quantitative data through rating scales (1) and qualitative data through semi-structured interviews (1)	2
Total	/3

(ii) Evaluate this method of data collection.

(2 marks)

Description	Marks
Correctly states a strength. Answers may include but are not limited to: <ul style="list-style-type: none"> allows the research question to be studied thoroughly from different perspectives the strengths of quantitative methods will counterbalance the limitations of qualitative methods, and vice versa 	1
Correctly states a limitation. Answers may include but are not limited to: <ul style="list-style-type: none"> requires more expertise and resources to collect and analyse data, and to interpret the results, than using a single method 	1
Total	/2

(c) Outline one way this study was designed to minimise the effects of extraneous and confounding variables.

(4 marks)

Description	Marks
Identifies a method to minimise the effects of extraneous and confounding variables used in this study (random allocation or single blind procedure)	1
Outlines the method identified	1
States how this method minimises the effects of extraneous and confounding variables	1
States an example from the scenario	1
Total	/4
Examples of possible answers:	
<p>The study used random allocation (1), where every member of the sample has an equal chance of being assigned to either the control or experimental group (1). This is done so that the control and experimental groups should (theoretically) have similar characteristics (1). In this study, a computer assigned participants to either the experimental group or the control group (1).</p> <p>The study used a single blind procedure (1) where the participants do not know whether they're in the experimental or control group (1). This limits the difference where certain expectations being experienced by members of the experimental group are not experienced by the control group (1). In this study, participants in the control group didn't know they had been given a placebo (1).</p>	
Assessment total	/54

Sample assessment task

Psychology – ATAR Year 12

Task 6 – Unit 4 – Applications of psychology to health and Science inquiry

Assessment type	Response
Conditions	In class under test conditions Time for the task: 5 minutes reading time, 35 minutes working time
Task weighting	8% of the school mark for this pair of units

Scenario – Stress

(34 marks)

Safiya is a 28-year-old coder in a small start-up company in the IT industry who is shocked when her line manager quits. She immediately feels a sense of panic and her heart rate increases when she hears the news, as her manager had been a mentor to her, and she isn't sure she can cope with getting a new, potentially inferior manager.

The company asks Safiya to step into her manager's position. She is excited by the opportunity despite high demands and increased responsibilities, particularly as she is also planning her wedding to her long-term partner. However, she continues to push through, believing she can handle the pressure and the job will get easier with time.

After a few months, Safiya's resilience begins to wane. She is only able to take a short break for her wedding, and she finds herself feeling fatigued, which results in her being impatient with her colleagues for whom she is now responsible. Safiya starts experiencing frequent headaches and feeling increasingly apathetic towards her work.

Eventually, Safiya goes to see a psychologist after her friends and family express concerns about her wellbeing and so she can learn some healthier ways of coping with stress. During her first few sessions, Safiya is asked to complete the Social Readjustment Scale. There is also a discussion about some of the maladaptive coping strategies she has been using to deal with her stress, and how she could use adaptive ones.

Write an extended answer that demonstrates Science inquiry and Psychological knowledge and understanding in relation to the scenario above.

In your answer you must:

- define stress (1 mark)
- outline the difference between eustress and distress using examples from the scenario (4 marks)
- explain the three stages of the General Adaptation Syndrome (GAS) model and apply them to Safiya (12 marks)
- identify which life event would be considered the most stressful according to the Social Readjustment Scale (1 mark)
- discuss the Social Readjustment Scale as a method of assessing the impact of stressors (4 marks)
- identify the type of data collection the Social Readjustment Scale uses and state one strength and one limitation of this method (3 marks)

- contrast adaptive and maladaptive coping strategies and suggest how Safiya may use each (5 marks)
- communicate psychological understandings clearly with correct use of psychological language. (4 marks)

Marking key for sample assessment task 6 — Unit 4

Description	Marks
Define stress	
Stress is the nonspecific response of the body to any demand	1
Subtotal	/1
Outline the difference between eustress and distress using examples from the scenario	
Eustress is positive stress that results from challenging but attainable and enjoyable or worthwhile tasks (1) Examples from the scenario: Safiya getting a promotion at work OR her wedding (1)	2
Distress is negative stress that results from being overwhelmed by demands, losses or perceived threats (1) Example from the scenario: Safiya's line manager quitting (1)	2
Subtotal	/4
Explain the three stages of the General Adaptation Syndrome (GAS) model and apply them to Safiya	
Stage 1: Alarm	1
Any two – answers may include but are not limited to: <ul style="list-style-type: none"> alarm is the initial response to a stressor a distress signal is sent to the hypothalamus which releases stress hormones hormones such as adrenaline and cortisol prepare the body to either fight or flee the situation the sympathetic nervous system becomes activated physical symptoms include increased heart rate and breathing rate psychological symptoms include fear or anger 	2
Application to Safiya: she feels a sense of panic when her line manager quits	1
Stage 2: Resistance	1
Any two – answers may include but are not limited to: <ul style="list-style-type: none"> the body responds to the stressor by adapting the parasympathetic nervous system tries to reverse the changes that occurred during the alarm stage the individual may feel more in control of the situation 	2
Application to Safiya: she believes she can handle the pressure of the new job	1
Stage 3: Exhaustion	1
Any two – answers may include but are not limited to: <ul style="list-style-type: none"> occurs after a prolonged period of stress or if stress is not dealt with effectively the body's resources are depleted and are unable to cope with the stress increased risk of developing physical illness during this stage physical symptoms include fatigue, muscle aches and headaches psychological symptoms include depression, anxiety and lack of motivation 	2
Application to Safiya: she is impatient with her colleagues OR she experiences frequent headaches OR she feels apathetic about her work	1
Subtotal	/12

Description	Marks
Identify which life event would be considered the most stressful according to the Social Readjustment Scale	
Her wedding/marriage	1
Subtotal	/1
Discuss the Social Readjustment Scale as a method of assessing the impact of stressors	
The Social Readjustment Scale assesses how much stress a person has experienced in the past year	1
The respondent indicates which of 43 life events they have experienced	1
Each event is assigned a Life Change Unit (LCU) score ranging from 10 to 100, depending on how stressful the event is	1
A high total LCU score is associated with an increased risk of developing physical and mental health problems	1
Subtotal	/4
Accept other relevant responses.	
Identify the type of data collection the Social Readjustment Scale uses and state one strength and one limitation of this method	
Type: subjective quantitative	1
States a strength – answers may include but are not limited to: <ul style="list-style-type: none"> • can understand strength and/or direction of response on a continuum • can be statistically analysed 	1
States a limitation – answers may include but are not limited to: <ul style="list-style-type: none"> • does not provide any more detail about the characteristic • does not provide the reasoning behind the response 	1
Subtotal	/3
Contrast adaptive and maladaptive coping strategies and suggest how Safiya may use each	
Adaptive coping strategies are healthy and constructive ways of dealing with stress	1
Maladaptive coping strategies are unhealthy and destructive ways of dealing with stress	1
Adaptive coping strategies will reduce the negative effects of stress whereas maladaptive strategies will worsen them	1
Provides an example of an adaptive coping mechanism. Answers may include but are not limited to: <ul style="list-style-type: none"> • exercise • meditation • seeking social support • healthy diet • healthy sleep routine 	1
Provides an example of a maladaptive coping mechanism. Answers may include but are not limited to: <ul style="list-style-type: none"> • substance abuse • avoidance behaviours • social withdrawal • negative self-talk and blaming 	1
Subtotal	/5

Description	Marks
Communicate psychological understandings clearly with correct use of psychological language	
Accurately uses a variety of appropriate psychological terminology relevant to theories, studies, models and concepts fluently and in a clear and logical way. (Does not need essay-style broad introduction or conclusion for full marks)	4
Accurately uses some appropriate psychological terminology relevant to theories, studies, models and concepts in a clear and logical way	3
Uses some psychological terminology correctly with limited relevance to theories, studies, models and concepts	2
Uses everyday language with limited relevance to theories, studies, models and concepts	1
Subtotal	/4
Total	/34

Sample assessment task

Psychology – ATAR Year 12

Task 7 – Unit 4 – Application of psychology to health – Sleep hygiene

Assessment type	Science inquiry (Practical)
Conditions	Part A: One lesson in class, 10 days at home to collect data Part B: One lesson in class. Students will be allowed to bring in their subjective quantitative measure, directional hypothesis, standardised set of instructions and procedure, and data.
Task weighting	12% of the school mark for this pair of units

Sleep hygiene practical activity (53 marks)

Science inquiry is at the core of psychological knowledge and understanding. This task will develop your understanding of both sleep hygiene and science inquiry.

In Part A, you will create a directional hypothesis and design a quantitative subjective measure to assess the impact of a technique to improve sleep hygiene on sleep quality, then collect data using this measure at home over 10 days. All participants in the investigation activity must provide informed consent.

In Part B, you will complete questions to demonstrate your data processing, research evaluation and knowledge of your chosen technique.

Marks will be allocated as follows:

Subjective quantitative measure	3 marks
Standardised procedure and instructions	3 marks
Processing and analysis of research	47 marks
Total marks	53 marks

Part A (6 marks)

At home for 10 days, you will be testing the impact of one of the following techniques to improve sleep hygiene:

- management of electronic devices
- consistent sleep patterns
- creation of a healthy sleep environment.

To measure the impact this technique has on your sleep quality over the 10 days, you will create a **quantitative subjective measure** such as a short survey that uses a rating scale. You need to consider the reliability and validity of the measure you create.

You also need to write a clear **standardised set of procedures and instructions**.

You need to create a **directional hypothesis** as you will be referring to it during Part B.

You will need to **record the data** you collect and **calculate relevant measures of central tendency**. You will bring this in to further analyse.

Part B

(47 marks)

1. Identify the following variables in your study.

(3 marks)

Independent

Dependent

Controlled

2. The study you have conducted uses experimental design.

(a) Outline why it is considered experimental research.

(2 marks)

(b) (i) Identify one feature of experimental research that is missing from this study.

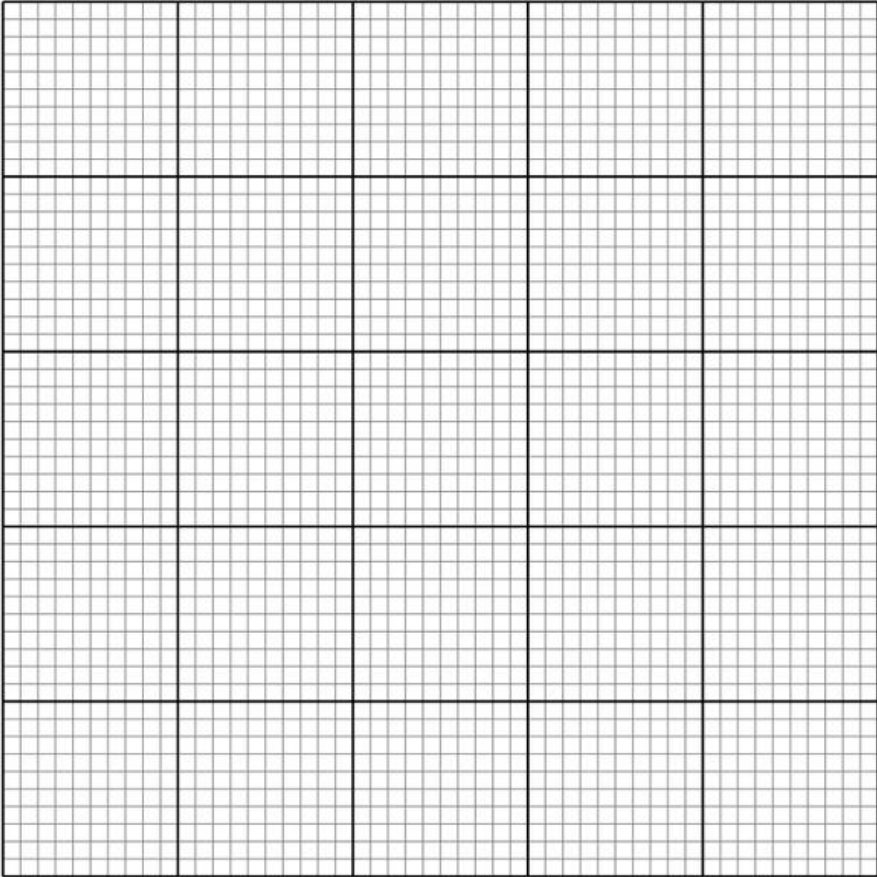
(1 mark)

(ii) Explain why experimental research should have this feature.

(2 marks)

3. Construct an appropriate graph to display your data.

(5 marks)



4. Formulate an evidence-based conclusion that uses your data and explains your findings using psychological theories and concepts.

(7 marks)

5. The data was collected using a subjective quantitative measure.

(a) With reference to your study, outline a strength of this method of data collection. (2 marks)

(b) Suggest how qualitative data could be collected in a future study. (4 marks)

(c) Explain how qualitative data addresses a limitation of quantitative data. (2 marks)

(d) Assess the reliability and validity of the subjective quantitative measure you created. (4 marks)

Reliability: _____

Validity: _____

6. Imagine we were going to run this study again but with the feature identified in your answer to 2(b)(i) and a larger sample, the target population being high school students in Western Australia.

(a) Assess which sampling technique would be most appropriate to get a representative sample of all students in Western Australia. (3 marks)

(b) You have already written a standardised procedure and instructions that could be used in the future study. Explain the purpose of having these in the study. (3 marks)

(c) Suggest how you would minimise the effects of extraneous and confounding variables other than having a standardised procedure. (3 marks)

(d) Identify two ethical considerations and explain how you would address them. (6 marks)

One: _____

Two: _____

Marking key for sample assessment task 7 – Unit 4

Part A (6 marks)

Quantitative subjective measure (3 marks)

Description	Marks
Collects data with a measure related to sleep quality	1
Collects data of a subjective and quantitative nature	1
Uses a measure featuring a rating scale format	1
Total	/3

Standardised procedure and instructions (3 marks)

Description	Marks
Clearly describes the procedure and instructions so the study can be easily and accurately replicated with extraneous and confounding variables minimised	3
Clearly describes the procedure and instructions so the study can be easily replicated	2
Broadly outlines the procedure and instructions but lacks clarity in parts	1
Total	/3

Part B (47 marks)

1. Identify the following variables in your study. (3 marks)

Description	Marks
Independent: the implementation of the chosen technique to improve sleep hygiene	1
Dependent: sleep quality	1
Controlled: correctly identifies a controlled variable relevant to the study	1
Total	/3

2. The study you have conducted uses experimental design.

(a) Outline why it is considered experimental research. (2 marks)

Description	Marks
It involves the manipulation of a variable (technique to improve sleep quality)	1
to test the effect it has on another variable (sleep quality)	1
Total	/2
Accept other relevant responses.	

(b) (i) Identify one feature of experimental research that is missing from this study. (1 mark)

Description	Marks
Control group	1
Total	/1

(ii) Explain why experimental research should have this feature.

(2 marks)

Description	Marks
To use as a standard for comparison against the experimental group	1
To see how much impact the independent variable has had on the dependent variable	1
Total	/2
Accept other relevant responses.	

3. Construct an appropriate graph to display your data.

(5 marks)

Description	Marks
Uses correct form of data display	1
Appropriately labels both axes	1
Uses an even and appropriate scale	1
Includes correct variables in title	1
Represents data accurately in graph	1
Total	/5

4. Formulate an evidence-based conclusion that uses your data and explains your findings using psychological theories and concepts.

(7 marks)

Description	Marks
States clearly whether hypothesis or inquiry question was supported or not supported	1
Subtotal	/1
Supports conclusion with a wide range of relevant evidence from the data collected	3
Supports conclusion with a range of relevant evidence from the data collected	2
Supports conclusion with brief references to evidence from the data collected	1
Subtotal	/3
Explains in detail how the results relate to psychological theories and concepts	3
Describes how the results relate to psychological theories and concepts	2
Outlines how the results relate to psychological theories and concepts	1
Subtotal	/3
Total	/7

5. The data was collected using a subjective quantitative measure.

(a) With reference to your study, outline a strength of this method of data collection. (2 marks)

Description	Marks
Correctly outlines a strength of the subjective quantitative method used	1
Applies it to the study	1
Total	/2
<p>Example answers: An advantage of rating scales is that they measure the strength and/or direction of response on a continuum. For my study, I wanted to measure not only whether sleep quality improved or decreased, but also by how much.</p>	

(b) Suggest how qualitative data could be collected in a future study. (4 marks)

Description	Marks
Correctly identifies a qualitative method	1
Subtotal	/1
Clearly describes chosen method	2
Broadly outlines chosen method	1
Subtotal	/2
Applies it to the study	1
Subtotal	/1
Total	/4
<p>Example answer: Qualitative data could be collected using semi-structured interviews (1). The researcher would record participants' responses to a series of predetermined questions, but the order of asking them could be varied by the researcher (1). The wording of questions could also be varied and explanations could be given if needed; also, questions could be added or omitted (1). For example, the researcher might ask, 'Describe how your sleep quality improved from Day 1 to Day 10' and rephrase the question if the participant is unsure of what the researcher means (1).</p>	

(c) Explain how qualitative data addresses a limitation of quantitative data. (2 marks)

Description	Marks
Quantitative data does not provide the reasoning behind a participant's response	1
Qualitative data allows the participant to elaborate on their responses (and provide reasons for their response)	1
Total	/2
Accept other relevant answers.	

(d) Assess the reliability and validity of the subjective quantitative measure you created.

(4 marks)

Description	Marks
Correctly identifies reliability	1
Assesses reliability of the subjective quantitative measure	1
Subtotal	/2
Correctly identifies validity	1
Assesses validity of the subjective quantitative measure	1
Subtotal	/2
Total	/4

6. Imagine we were going to run this study again but with the feature identified in your answer to 2(b)(i) and a larger sample, the target population being high school students in Western Australia.

(a) Assess which sampling technique would be most appropriate to get a representative sample of all students in Western Australia.

(3 marks)

Description	Marks
Stratified sampling	1
Involves groups based on shared characteristics; a random sample is selected from each stratum	1
This sampling technique will ensure that all schools across Western Australian and/or all year groups are equally represented	1
Total	/3

(b) You have already written a standardised procedure and instructions that could be used in the future study. Explain the purpose of having these.

(3 marks)

Description	Marks
To minimise the effects of extraneous and confounding variables	1
by ensuring that all participants have the same experience in the experiment	1
For this study, it means when it is replicated with a larger sample, the results will hopefully be caused by the independent variable and not extraneous variables	1
Total	/3

(c) Suggest how you would minimise the effects of extraneous and confounding variables other than having a standardised procedure.

(3 marks)

Description	Marks
Random allocation of participants	1
Participants have an equal chance of being assigned to either the experimental group where they use the technique for ten days	1
or the control group where they do not	1
Total	/3

(d) Identify two ethical considerations and explain how you would address them. (6 marks)

Description	Marks
Identifies an ethical consideration	1
Describes the ethical consideration identified	1
States how it would be addressed in the study	1
Subtotal	/3
Identifies an ethical consideration	1
Describes the ethical consideration identified	1
States how it would be addressed in the study	1
Subtotal	/3
Total	/6
Assessment total	/53

Attachment 1: Informed consent letter for participants

Dear student/parent/guardian

As part of the Psychology ATAR Year 12 course, students are able to participate in a Science inquiry activity to collect data to be used in their Practical Science inquiry assessment. Details of the activity are outlined below.

Aim – to investigate the impact of a sleep hygiene technique on the quality of sleep.

Method – this Science inquiry activity requires students to test one of the following techniques to improve sleep hygiene:

- management of electronic devices
- consistent sleep patterns
- creation of a healthy sleep environment.

Students will be implementing their chosen technique for 10 nights and recording data on their sleep quality using a survey they have designed themselves.

Risks – there are no known risks to participants' health or wellbeing in the conduct of this Science inquiry.

Privacy and anonymity – the data will be recorded using an allocated code for each participant to protect anonymity. All raw data will be destroyed at the completion of this semester. No individual names will be published or reported.

Withdrawal – even if a participant has signed this consent form, they may withdraw from the Science inquiry activity at any time without consequence. If they choose to withdraw at any time, their data will be removed from the dataset to be used for the Science inquiry report.

Future use of collated data – collated data sets collected in this task may be used in future studies with no identification of participants at any time.

If participants are under 18: your parent/guardian must also provide consent for your participation in the Science inquiry activity. If they agree to your participation, please ask them to sign the provided consent form. No one can participate without a completed consent form.

If participants are over 18 and capable of informed consent: please sign the consent form provided.

If you (or your parent/guardian) would like further information or clarification, please do not hesitate to speak with or email me.

Yours sincerely

<teacher name>

Attachment 2: Informed consent form

Participant name:

Task: **Science inquiry (Practical) – Applications of psychology to health – Sleep hygiene**

Teacher name:

I consent to participate in the activity outlined for the Science inquiry task named above. The aim of the research and procedure has been explained to me and is summarised in the information letter I have received.

I give permission for the responsible teacher, named above, to use the procedures for this Science inquiry with me.

I understand that:

- (a) I am free to withdraw from the Science inquiry at any time. There will be no consequences if I decline to participate or if I initially agree to participate, but later decide to withdraw.
- (b) The Science inquiry activity is for the purpose of teaching and learning.
- (c) The confidentiality of the information I provide will be safeguarded. All data collected from me will be identified only by a code number to ensure anonymity.
- (d) The collated and de-identified data may be maintained for future use in teaching and learning activities.
- (e) There are no known adverse effects of participating in the Science inquiry activity.
- (f) I will maintain the confidentiality of all other participants in this Science inquiry.

Please return this consent form to your teacher.

Signed: _____ Date: _____
(Student)

Students under the age of 18 must have permission from a parent/guardian to participate in this investigation.

I consent to _____ participating in the Science inquiry activity identified above.

Signed: _____ Date: _____
(Parent/Guardian)

References

Craik, F. I. M., & Tulving, E. (1975). Depth of Processing and the Retention of Words in Episodic Memory. *Journal of Experimental Psychology: General*, 104(3), 268–294.

<https://doi.org/10.1037/0096-3445.104.3.268>

Lustig, C., & Hasher, L. (2001). Implicit Memory Is Not Immune to Interference. *Psychological Bulletin*, 127(5), 629–650. <https://doi.org/10.1037/0033-2909.127.5.618>

Porsteinsson, A. P., Grossberg, G. T., Mintzer, J., Olin, J. T., & Memantine MEM-MD-12 Study Group (2008). Memantine Treatment in Patients with Mild to Moderate Alzheimer's Disease Already Receiving a Cholinesterase Inhibitor: A Randomized, Double-Blind, Placebo-Controlled Trial. *Current Alzheimer Research*, 5(1), 83–89. <http://dx.doi.org/10.2174/156720508783884576>