



## SAMPLE ASSESSMENT TASKS

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**PSYCHOLOGY**  
**ATAR YEAR 12**

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Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

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## Sample assessment task

### Psychology – ATAR Year 12

#### Task 2 – Unit 3 – Memory – Forgetting and remembering

**Assessment type:** Science inquiry (Research)

#### Conditions

Part A: Research

- Two hours of class time.
- You will 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.
  - Need to state the aim, method and key findings for Craik and Tulving (1975) and a piece of contemporary research on forgetting and remembering.
  - No more than one A4 page and only containing the information above – no analysis and evaluation of sample, method or findings.

Part B: In-class component

- 5 minutes reading time
- 55 minutes working time
- Supervised in class with notes allowed
- Write detailed answers to the questions in Part B

#### Task weighting

8% of the school mark for this pair of units

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#### Part A

(5 marks)

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 for all sources used for this assessment.

(5 marks)

**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		We only encode the physical properties	
	Phonemic		
Deep			

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

(2 marks)

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

(4 marks)

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

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

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

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

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(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 first looked at a list of words, which were presented individually on screen. Unbeknownst to the participants, the words were divided into nontarget words and target words. Depending on whether the participants were in the control or experimental group, nontarget words were either similar or unrelated to the target words.

After completing a series of distractor tasks, participants completed 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 nontargets completed more of the fragments using the target words compared to those who saw similar nontargets.

- (a) Assess which type of interference Lustig and Hasher are investigating.

(3 marks)

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- (b) Prior to analysis, the researchers removed data from 40 participants as they had indicated 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)

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

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

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4. Porsteinsson et al (2008) investigated the effectiveness of a medication called Memantine in the treatment of Alzheimer's. Their sample consisted of participants with moderate to severe Alzheimer's 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 28mg 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 on behaviour and emotion. (2 marks)

One: \_\_\_\_\_

Two: \_\_\_\_\_

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

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

Strength: \_\_\_\_\_

Limitation: \_\_\_\_\_



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

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## Marking key for sample assessment task 2 – Unit 3

### Part A

Provides a correctly formatted APA reference list.

(5 marks)

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

### Part B

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	<b>Structural (1)</b>	We only encode the physical properties	Is the word in capital letters or small letters OR any other example from their research (1)
	Phonemic	<b>We encode the sound (1)</b>	Does the word rhyme with ...? OR any other example from their research (1)
Deep	<b>Semantic (1)</b>	<b>We encode the meaning (1)</b>	Does the word go in this sentence ...? OR any other example from their research (1)

(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
<b>Total</b>	<b>/2</b>
<b>Answers may include but are not limited to:</b>	
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
<b>Subtotal</b>	<b>/1</b>
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
<b>Subtotal</b>	<b>/3</b>
<b>Total</b>	<b>/4</b>

- (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 as they were told it was a test of perception	1
They should have been debriefed afterwards	1
Where the experimenters told them the true purpose of the experiment and why they'd been deceived	1
<b>Total</b>	<b>/4</b>

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

Description	Marks
Correctly states the aim	1
<b>Total</b>	<b>/1</b>

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

Description	Marks
Correctly identifies the research design	1
<b>Total</b>	<b>/1</b>

- (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
<b>Subtotal</b>	<b>/2</b>
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
<b>Subtotal</b>	<b>/2</b>
<b>Total</b>	<b>/4</b>

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

Description	Marks
States a correct strength	1
States a correct limitation	1
<b>Total</b>	<b>/2</b>

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

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

Description	Marks
Proactive (interference)	1
When old information prevents the recall of new information	1
The similar nontarget words in the experimental condition prevent the recall of the target words	1
<b>Total</b>	<b>/3</b>

(b) Prior to analysis, the researchers removed data from 40 participants as they had indicated 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 participant pick up on that suggest what the true purpose of the study is/what the researcher expects the results of the study to be	1
This could potentially affect the data as participants may behave in a way to support the hypothesis	1
<b>Total</b>	<b>/3</b>

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

Description	Marks
Convenience Sampling	1
A sample that consists of those people who are readily available to the researcher.	1
<b>Total</b>	<b>/2</b>

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

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

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

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

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

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

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

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

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

(c) Outline one way this study has been 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
<b>Total</b>	<b>/4</b>
<b>Answers may include</b>	
<p>The study uses random allocation (1), which is when 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 uses 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 between certain expectations being experienced by members of the experimental group that are not experienced by the control group. (1)</p> <p>In this study the control group doesn't know they have been given a placebo (1)</p>	

## 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

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**Extended Response**

**(34 marks)**

Safiya is a 28-year-old working as a 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 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 who she is now responsible for. 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.

In your answer you must:

- Define stress. (1 mark)
- Outline the difference between eustress and stress 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 a strength and 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
<b>Define stress.</b>	
Stress is the nonspecific response of the body to any demand	1
<b>Subtotal</b>	<b>/1</b>
<b>Outline the difference between eustress and stress using examples from the scenario.</b>	
Eustress is positive stress that results from challenging but attainable and enjoyable or worthwhile tasks (1) An example from the scenario is 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) An example from the scenario is Safiya's line manager quitting (1)	2
<b>Subtotal</b>	<b>/4</b>
<b>Explain the three stages of the General Adaptation Syndrome (GAS) model and apply them to Safiya.</b>	
Stage 1: Alarm	1
Any two – answers may include but are not limited to: <ul style="list-style-type: none"> <li>the initial response to a stressor</li> <li>a distress signal is sent to the hypothalamus which releases stress hormones</li> <li>hormones such as adrenaline and cortisol prepare the body to either fight or flee the situation</li> <li>the sympathetic nervous system will become activated</li> <li>physical symptoms include increased heart rate and breathing rate</li> <li>psychological symptoms include fear or anger</li> </ul>	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"> <li>the body responds to the stressor by adapting</li> <li>the parasympathetic nervous system tries to reverse the changes that occurred during the alarm stage</li> <li>the individual may feel more in control of the situation</li> </ul>	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"> <li>occurs after a prolonged period of stress or if stress is not dealt with effectively</li> <li>the body's resources are depleted and are unable to cope with the stress</li> <li>increased risk of developing physical illness during this stage</li> <li>physical symptoms include fatigue, muscle aches and headaches</li> <li>psychological symptoms include depression, anxiety and lack of motivation</li> </ul>	2
Application to Safiya: she is impatient with her colleagues OR she experiences frequent headaches OR she feels apathetic about her work	1
<b>Subtotal</b>	<b>/12</b>
<b>Identify which life event would be considered the most stressful according to the Social Readjustment scale</b>	
Her wedding/marriage	1
<b>Subtotal</b>	<b>/1</b>
<b>Discuss the Social Readjustment scale as a method of assessing the impact of stressors.</b>	
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
<b>Subtotal</b>	<b>/4</b>
<b>Accept other relevant responses</b>	
<b>Identify the type of data collection the Social Readjustment scale uses and state a strength and limitation of this method.</b>	
Subjective quantitative	1
States a strength – answers may include but are not limited to: <ul style="list-style-type: none"> <li>can understand strength and/or direction of response on a continuum</li> <li>can be statistically analysed.</li> </ul>	1
States a limitation – answers may include but are not limited to: <ul style="list-style-type: none"> <li>does not provide any more detail about the characteristic</li> <li>does not provide the reasoning behind the response.</li> </ul>	1
<b>Subtotal</b>	<b>/3</b>
<b>Contrast adaptive and maladaptive coping strategies and suggest how Safiya may use each.</b>	
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"> <li>exercise</li> <li>meditation</li> <li>seeking social support</li> <li>healthy diet</li> <li>healthy sleep routine</li> </ul>	1
Provides an example of a maladaptive coping mechanism. Answers may include but are not limited to: <ul style="list-style-type: none"> <li>substance abuse</li> <li>avoidance behaviours</li> <li>social withdrawal</li> <li>negative self-talk and blaming</li> </ul>	1
<b>Subtotal</b>	<b>/5</b>
<b>Communicate psychological understandings clearly with correct use of psychological language.</b>	
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 language with limited relevance to theories, studies, models and concepts.	2
Uses everyday language with limited relevance to theories, studies, models and concepts.	1
<b>Subtotal</b>	<b>/4</b>
<b>Total</b>	<b>/34</b>

## Sample assessment task

### Psychology – ATAR Year 12

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

**Assessment type:** Science inquiry (Practical)

**Task weighting:** 12% of the school mark for this pair of units

#### Conditions

Part A: One lesson in class to create a directional hypothesis and design a quantitative subjective measure to assess the impact of a technique to improve sleep hygiene on sleep quality, and ten days at home to collect data using the measure. All participants in the investigation activity must provide informed consent.

Part B: One lesson in class to complete in class questions to demonstrate processing of data and evaluation of research, and your knowledge of your chosen technique.

Students will be allowed to bring in their subjective quantitative measure, their directional hypothesis, their standardised set of instructions and procedure, and data.

#### Mark allocation

Subjective quantitative measure	3 marks
Standardised procedure and instructions	3 marks
Processing and analysis of research	47 marks
<b>Total marks:</b>	<b>53 marks</b>

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#### Task Description

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

#### Part A (6 marks)

At home for ten 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

You will be measuring the impact this technique has on your sleep quality over the ten days - you will create a **quantitative subjective measure** such as a **checklist** or a short **survey that uses a rating scale** to do this. 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 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

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Dependent

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Controlled

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2. The study you have conducted uses experimental design.

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

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

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(ii) Explain why experimental research should have this feature. (2 marks)

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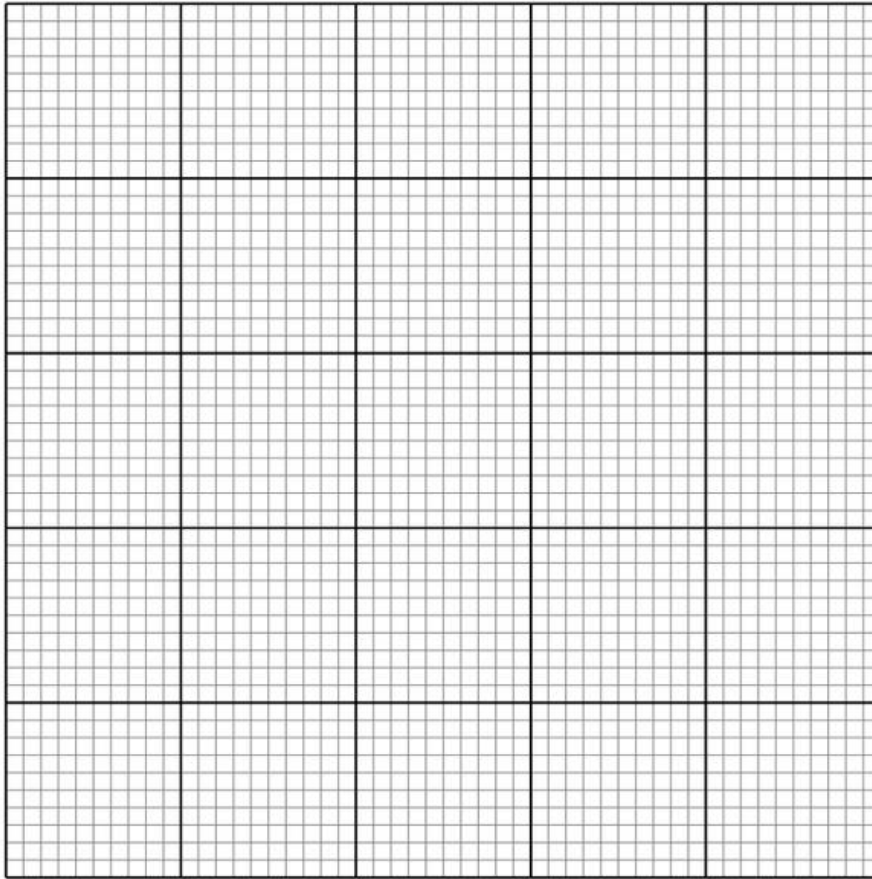
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3. Construct an appropriate graph to display your data.

(5 marks)



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

(7 marks)

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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)

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

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

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

(4 marks)

Reliability: \_\_\_\_\_

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Validity: \_\_\_\_\_

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6. Imagine we were going to run this study again but with the feature identify in 2 (b) (i) and a larger sample with 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)

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(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)

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

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(d) Explain how you would address two ethical considerations.

(6 marks)

One: \_\_\_\_\_

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Two: \_\_\_\_\_

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## Marking key for sample assessment task 7 – Unit 4

### Part A

Subjective quantitative 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 the format of a rating scale or checklist	1
<b>Total</b>	<b>/3</b>

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
<b>Total</b>	<b>/3</b>

### Part B

1. Identify the following variables in your study.

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
<b>Total</b>	<b>/3</b>

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
<b>Total</b>	<b>/2</b>
<b>Accept other relevant responses</b>	

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

Description	Marks
Control group	1
<b>Total</b>	<b>/1</b>



- (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
<b>Total</b>	<b>/2</b>
<b>Accept other relevant responses</b>	

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
<b>Total</b>	<b>/5</b>

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/not supported	1
<b>Subtotal</b>	<b>/1</b>
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
<b>Subtotal</b>	<b>/3</b>
Explains in detail how the results relate to psychological theories and concepts (the technique to improve sleep hygiene implemented)	3
Describes how the results relate to psychological theories and concepts (the technique to improve sleep hygiene implemented)	2
Outlines how the results relate to psychological theories and concepts (the technique to improve sleep hygiene implemented)	1
<b>Subtotal</b>	<b>/3</b>
<b>Total</b>	<b>/7</b>

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
Outlines a correct strength of the subjective quantitative method used	1
Applies to the study	1
<b>Total</b>	<b>/2</b>
<p>Correct answers may include:</p> <p>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> <p>An advantage of checklists is that a large amount of data can be collected quickly. For my student, I wanted to collect a large amount of data about the quality of my sleep and as I was doing this every day for ten days, a checklist was an efficient way of collecting the data.</p>	

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

Description	Marks
Correctly identifies a qualitative method	1
<b>Subtotal</b>	<b>/1</b>
Clearly describes chosen method	2
Broadly outlines chosen method	1
<b>Subtotal</b>	<b>/2</b>
Applies to study	1
<b>Subtotal</b>	<b>/1</b>
<b>Total</b>	<b>/4</b>
<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 can be varied by the researcher. (1) The wording of questions can also be varied and explanations can be given if needed, plus questions can be added or omitted. (1) For example, the researcher may ask 'Describe how your sleep quality improved from Day 1 to Day 10' and they can 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 behind a participant's response	1
Qualitative data allows the participant to elaborate on their responses (and provide reasons for their response)	1
<b>Total</b>	<b>/2</b>
<b>Accept other relevant answers</b>	

(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
<b>Subtotal</b>	<b>/2</b>
Correctly identifies validity	1
Assesses validity of the subjective quantitative measure	1
<b>Subtotal</b>	<b>/2</b>
<b>Total</b>	<b>/4</b>

6. Imagine we were going to run this study again but with the feature identify in 2 (b) (i) and a larger sample with 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 and a random sample is then 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
<b>Total</b>	<b>/3</b>

- (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
<b>Total</b>	<b>/3</b>

- (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
<b>Total</b>	<b>/3</b>

- (d) Outline how you would address two ethical considerations. (6 marks)

Description	Marks
Identifies an ethical consideration	1
Describes the ethical consideration identified	1
States how it would be addressed in study	1
<b>Subtotal</b>	<b>/3</b>
Identifies an ethical consideration	1
Describes the ethical consideration identified	1
States how it would be addressed in study	1
<b>Subtotal</b>	<b>/3</b>
<b>Total</b>	<b>/6</b>

**Attachment 1: Informed consent letter for participants**

Dear student/parent/guardian

As part of the Year 12 ATAR Psychology 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 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 ten nights and recording data on their sleep quality using survey or checklist 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 you have signed this consent form, you may withdraw from the Science inquiry activity at any time without consequence. If you choose to withdraw at any time, your data will be removed from the data set 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 your participation 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 student/person is able to 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

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