

Abdullah

Syllabus points

- Applications of psychology to health
- Ethical guidelines and practices for psychological research
- Formulating research
- Methodology
- Data collection
- Drawing conclusions
- Evaluation of research

Conditions

Reading time: 5 minutes

Working time: 40 minutes

Task Weighting

- 7%

$$\begin{array}{r} 6 \\ + 4 \\ \hline 10 \\ + 7 \\ \hline 17 \\ + 6 \\ \hline 23 \\ + 5 \\ \hline 28 \end{array}$$

Structure of this paper

Section	Number of questions available	Number of questions to be attempted	Suggested working time (minutes)	Marks	Score
Section One: Short Answer	5	5	40	41	
Total				41	

~~Q3 = 6 marks~~

4b - 4 marks

5b -

Part B

(41 marks)

1. Identify the following variables in your study.

(3 marks)

Independent

device usage 30 minutes before bed or ~~no~~ no device usage 30 minutes before bed

Dependent

The sleep quality, duration, mood, attention and cognitive function throughout the day on a self measure scale.

Controlled

year 12 students (17-18 year olds)

2. The study you have conducted uses experimental design.

(a) Outline why it is considered experimental research.

(2 marks)

This is experimental because changing the independent variable has an effect on the dependent. Using devices 30 minutes before bed will reduce sleep quality, duration, mood ~~or~~ attention and cognitive functioning whereas not using devices 30 minutes before bed would increase these.

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

control group

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

(2 marks)

This is so the experimenter can compare the results from the control group and experimental group to see if there is a correlation between the two variables or not.

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

(6 marks)

10-Year 12 ~~ps~~ATAR psychology students were

selected in the study. The study found the relationship between whether using devices

30 minutes before bed or not has an effect

on the sleep duration, quality, mood, attention and

cognitive functioning throughout the day on a

self measure scale. It can be concluded that

using ~~the~~ devices 30 minutes before bed

decreases the sleep duration, quality, lowers

mood, attention and cognitive functioning in

teenagers. This is due to the blue light

~~from~~ devices that disrupt ~~your~~ the circadian
rhythm as well as release ^{low} melatonin which is a

sleeping hormone which all reduces sleep

duration and quality which affects mood,

attention and cognitive functioning negatively.

- results - the class → sample → content

4. 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)

Quantitative data is short and easy to do and doesn't take time. The self measure scale was out of 10 and it took no time to do.

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

A ~~sur~~ survey could be done. This survey could have a number of questions the participants have to answer in words. This would provide rich qualitative data as it'll be words but it will be time consuming.

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

- Quantitative data isn't detailed as it's numerical whereas qualitative data is detailed as it's words and descriptions.

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

The sample size of 10 is too small it should be increased to increase the reliability.
Reliability: low as 10 is small size

It has low reliability. This is where if the experiment would be conducted again would it have same/similar results. Its reliability is low due to small sample size.

Validity: low validity, this refers to the experiment measuring what it's supposed to. The small sample size reduces the validity as 10 participants aren't enough to make accurate conclusions. Sample size should be increased to increase the validity.

control group

5. Imagine we were going to run this study again but with the feature identified 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)

Convenience sampling. This is where the participants are chosen due to convenience and accessibility. The experimenter could get participants from a few schools who are studying the year 12 ~~After psychology course. different schools.~~

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

This is done so if the study was to be replicated, the individuals replicating it could see what we did exactly and improve their study or build on it or use it as a foundation. This also minimises the effects of the extraneous and confounding variables.

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

have more control variables. These could be like ^{making} ~~sure~~ all participants don't have anxiety, depression or mental illness. ~~This would~~ As these affect the results, minimising those variables would make the study more accurate and reduce extraneous and confounding variables.

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

(6 marks)

One: Right to withdraw - I would include a consent form that mentions the purpose, aim, any risks ~~and~~ associated with the experiment and as well as letting them know they can leave at any time without consequences or judgement. This would allow participants to feel safe.

Two: Confidentiality - I would not use participants real names. ~~and~~ I would use numbers such as P1, P2, P3 to keep their identity safe. This way other participants won't know who is who and further protect the participants rights. The data will be kept safe and secure.
~~and~~