

Psychology Summer Homework – Research Methods

This sheet must be **completed** and **brought to** your **first** lesson back in **September. It is essential that you bring it as you WILL be using it in the first lesson.**

In Psychology you must be capable of independent, self-directed study, which this task will give you essential practice in. You need to research the terms on this sheet, and make succinct, accurate notes on each area.

You do not need access to books to do this – all the information is online. E.g. search for tutor2u, S-Cool, simplypsychology. You can make a glossary on computer or make a mind map if you prefer – as long as you have all the information on your revision resource you do not have to use this sheet. It is not acceptable to say that you “cannot find” the information: if you try you will find it.

EXPERIMENTAL METHODS there are four kinds of experiment - explain what makes each unique

Laboratory experiments

Field experiments

Natural experiments

Quasi-experiments (especially how they are different to natural experiments)

SCIENTIFIC PROCESSES how we design and carry out the science of Psychology

The difference between **aims** and **hypotheses**

Experimental Design

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X
P
E
R
I
M
E
N
T
A
L

Repeated measures
Independent groups
Matched pairs

Types of hypotheses

Research Hypothesis (H_1)

Correlational hypothesis (H_1)

Directional hypothesis (1tailed)

Non-directional hypothesis (2 tailed)

Null hypothesis (H_0)

Types of variables				
Independent (IV):		Dependent (DV):		
Extraneous variables:		Confounding variables:		
Sampling methods (how we select the participants from the population)				
Random sampling:	Systematic sampling:	Stratified sampling:	Opportunity sampling:	Volunteer sampling:

Now have a go at these questions using some of the knowledge above:

Apply it

Concepts: Directional or non-directional

Decide whether the following hypotheses are directional or non-directional. What features/words in each hypothesis are important when making your choice?

1. There is a difference in children's reading ability depending on whether they have blue or brown eyes.
2. Dogs that are rewarded with treats sit when told to do so more often than dogs that are not rewarded with treats.
3. There is a difference in the psychology grades of students depending on whether they are male or female.
4. Teenagers who watch horror films have more friends than teenagers who watch romantic comedies.

Apply it **Concepts: Which design?**

Which of the following is an independent groups design, a repeated measures design or a matched pairs design?

1. Depressed patients were assigned to receive either cognitive therapy or behaviour therapy for a 12-week period. A standardised test for depression was administered and participants were paired on the severity of their symptoms.
2. A researcher randomly assigned student volunteers to two conditions. Those in condition one attempted to recall a list of words that were organised into meaningful categories; those in condition two attempted to recall the same words, randomly grouped on the page.
3. To investigate whether students are more alert in the morning or the afternoon, each student is given a hazard perception test before school and at the end of the day.

1.
2.
3.
4.

1.
2.
3.