## Key Vocabulary for Experiments

Term	Translation	Meaning
Alternate hypothesis		A prediction that the conditions in an experiment will perform differently on the dependent variable.
Boredom effect		When participants do worse in the second condition of an experiment because they are bored. It is an order effect which can happen in repeated measures designs.
Cause and effect		Claiming that one variable alters another variable.
Confounding variable		A variable (not the IV) which has not been controlled for and may have impacted on the dependent variable
Control condition		A group who do not receive an intervention or do not have the characteristics being studied
Controls		Variables which are kept the same in all conditions
Counterbalancing		Half of the participants do the conditions in one order, half do them in the opposite order. This cancels out order effects in a repeated measures design. (Sometimes known as ABBA design)
Demand characteristics		When participants realise the aim of the study and show unnatural behaviour (usually in an attempt to please the experimenter)
Dependent Variable		The variable which is measured in an experiment
Experiment		A study in which an independent variable is manipulated and its effect on a dependent variable is measured
Experimental condition		The group being actively investigated in an experiment (opposite to control condition)
Experimental condition/level		One group of the independent variable e.g. if the IV is gender, the conditions are male and female
Extraneous variable		A variable which is not the independent variable but could have an unwanted effect on the dependent variable
Fatigue effect		Participants perform worse in the second condition of a repeated measures design because they are tired. This is a type of order effect.
Field experiment		An experiment in which the IV is manipulated by the researcher but the setting is natural.

Independent measures design	Participants take part in one condition of the independent variable
Independent Variable	The variable being manipulated (changed) in an experiment
Laboratory experiment	An experiment in which the IV is manipulated by the experimenter and the environment is highly controlled
Matched pairs design	Participants take part in one condition of the independent variable but are matched on their characteristics prior to the study
Null hypothesis	Predicting that there will be no difference between the conditions in performance on the DV e.g. there will not be a difference between boys and girls in scores on the maths test
One tailed hypothesis	A prediction which states which condition will perform better on the DV. E.g. boys will perform better than girls on the maths test
Operationalise	Explain how a variable is put into practice on that particular study
Order effects	When participants perform differently in the second condition because it is second, not because of the IV
Participant variables	Characteristics of the people in each condition
Practice effect	When participants perform better in the second condition of a repeated measures design because they have already practiced the task in the first condition. It is an order effect
Quasi experiment	An experiment in which the IV is naturally occurring (not manipulated by the experimenter). It can take place in any setting.
Repeated measures design	Participants take part in all conditions of the independent variable
Situational variables	Factors of the environment e.g. road noise
Standardised instructions	All participants are given exactly the same instructions for the task. This improves internal validity by increasing control. It also improves replicability as another researcher can use the script.
Standardised procedure	All participants are given exactly the same tasks at exactly the same timings.
Two tailed hypothesis	A prediction that the conditions will perform differently on the DV which does not state who will do better e.g. there will be a difference between girls and boys in scores on the maths test