

Worksheet 9: Designing experiments answers

- 1 Complete the following table including detail of how you would operationalise the independent and dependent variables when planning this experiment:

Type of variable	Name of variable	Operationalised variable
Independent	Use of antipsychotic drugs	Antipsychotic drug self-administered as pills to experimental group Placebo pill self-administered to control group
Dependent	Effective treatment of schizophrenia	Reduction in self-report of symptoms including: Visual hallucinations Auditory hallucinations

- 2 Write a sentence explaining how each of the experimental design features could be used in this study:

- independent measures

separate groups of people with schizophrenia take part in only one condition each, e.g. either experimental drug, placebo or no treatment

- matched pairs

separate groups of people with schizophrenia take part in only one condition each but each group contains one of each of a pair of participants who have been matched according to important characteristics, e.g. age, sex, severity of symptoms

- repeated measures

participants in the experiment take part in both conditions of the study at different times, e.g. take experimental drug for six weeks then take placebo for six weeks or vice versa

- 3 Give an example of one participant variable, including how it could be controlled in this study. An example of an uncontrolled variable has been completed as an example:

Variable	Example	Way to control
Uncontrolled	The two types of drugs might look different	Ensure experimental drug and placebo drug look the same
Participant	Some people may have more severe symptoms of schizophrenia than others	Use a matched pairs design to control for severity