

Step 1 Cheat Sheet by Robyn.jll via cheatography.com/146401/cs/31680/

Hypotheses	
H0: Null	the H0 of a test always
Hypothesis	predicts no effect or no relati-
	onship between variables
H1: Altern-	H1 states your research
ative	prediction of an effect or
Hypothesis	realtionship

Researcl	h Design
experi- mental design	you can assess a cause-and- effect using statistical tests of comparison or regression. e.g., the effect of meditation on
	test scores
correl- ational design	you can explore relationships between variables without any assumption of causality using correlation coefficients and signif- icance tests.
	e.g., parental income and GPA
descri- ptive design	you can study the characteristics of a population or phenomenon using statistical tests to draw inferences from sample data.
	e.g., the prevalence of anxiety in U.S. college students

Between/Within - subject Design	Between	/Within	- subject	Design
---------------------------------	---------	---------	-----------	--------

betwee individuals receive only one of the possible levels of an experimental n-subject treatment design

> e.g., subjects are randomly assigned a level of phone use and follow that level of phone use throughout the experiment

Research Design (cont)			
within-su- bject design	every individual receives each of the experimental treatments consecutively, and their responses to each treatment are measured		
	e.g., subjects are assigned consecutively to zero, low, and high levels of phone use throughout the experiment, and the order in which they follow these treatments is randomized		
Randomisation	on		
completely randomized design	every subject is assigned to a treatment group at random		
randomized block design	subjects are first grouped according to a characteristic they share, and then		

Measuring Variables		
Dependent Variable	Variable that represents the outcome	
Indepe- ndent Variable	Variables you manipulate in order to affect the outcome of an experiement	
Controlled Variable	Variables that are held constant throughout the experiment	

groups

randomly assigned to a treatment within those

Measuring \	/ariables (cont)		
Confou- nding Variable	Variables that hides the true effect of another variable in your experiment. This can happen when another variable is closely related to a variable you are interested in, but you have not controlled it in your experiment		
Latent Variable	Variables that cannot be directly measured, but that you represent via a proxy		
Composite Variable	Variables that are made by combining multiple variables in an experiment. These variables are created when you analyze date, not when you measure it		
Quantitative	Variables		
Discrete/- integer Variable	counts of individual items or values		
Contin- uous/ratio Variable	measurements of continuous or non-finite values		
Categorial V	Categorial Variables		
Binary/di- cho- tomous Variable	Yes / No Outcome		
Nominal Variable	groups with no rank or order between them		



By Robyn.jll

cheatography.com/robyn-jll/

Not published yet. Last updated 14th April, 2022. Page 1 of 1.

Sponsored by Readable.com

Measure your website readability!

specific order

groups that are ranked in a

https://readable.com

Ordinal

Variables