

## Choosing the right statistical test

What type of test do you need?				
<i>Experiment/Test of difference</i>			<i>Test of correlation</i>	
What type of data do you have?			What type of data do you have?	
<i>At least ordinal</i>		<i>Nominal</i>	<i>At least ordinal</i>	<i>Nominal</i>
Related or unrelated?		Related or unrelated?	Spearman's rank order	Chi squared
<i>Related</i>	<i>Unrelated</i>	<i>Unrelated</i>	When it's a correlational study we're assuming that the data are related. Chi squared appears twice because it's a test of association between different categories so you can view it as a test of correlation or a test of difference according to how you have designed your study.	
Wilcoxon signed ranks	Mann-Whitney U	Chi squared		

Scenario	Type of study?	Type of data?	Related or unrelated?	Test to use?
Researchers have content analysed witness statements obtained using standard interviews and cognitive interviews with different groups of witnesses. The number of correct assertions by each witness has been counted.				
Researchers are looking for a relationship between a person's score on a questionnaire that measures depressed symptoms and the number of stressful life events each PPs has experienced in the past year.				
Researchers are comparing maze-learning times between rats given a continuous reinforcement schedule and rats given a variable ratio reinforcement schedule.				
Researchers have measured students' reaction times to a light that switches on and off at random. Then then have given the students some caffeine and retested them.				

