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| Research question | Parametric | Nonparametric |
| Difference between two independent groups, e.g. male vs female blood pressure? | Independent t-test | Mann-Whitney test |
| Difference between two related groups, e.g. change in blood pressure? | Dependent t-test | Wilcoxon signed-rank test |
| Difference between several (3 >) unrelated groups? | One-way ANOVA | Kruskal-Wallis test |
| Relationship between two continuous variables, e.g. time spent studying vs mark obtained? | Pearson correlation | Spearman correlation |
| Predict one variable from another? | Multiple linear regression analysis | |
| Association between two categorical variables? | Pearson’s chi-square test of independence | |

**Steps in inferential statistics:**

1. Decide on appropriate statistical technique based on research question
2. Check assumptions:
   1. If assumptions hold -> parametric test
   2. If assumptions do not hold -> nonparametric test
3. Perform statistical test
4. Compare probability (p) value against significance level (α)
5. Reject (p < α) or do not reject (p > α) null hypothesis (Ho)
6. Interpret output and answer research question