

Parametric Statistical Tests

Statistical Test	Test Statistic	Purpose	Level of Measurement	
			Independent Variable	Dependent Variable
t-test for independent groups	t	Test the difference between two independent group means	Nominal (two independent groups)	Interval/ratio
Paired t-test	t (paired)	Test the difference between two related or same group means, usually at two points in time	Nominal (paired groups)	Interval/ratio
ANOVA	F	Test the difference among the means of three or more independent groups	Nominal (three or more independent groups)	Interval/ratio
Repeated-measures ANOVA	F	Test the difference among the means of three or more related groups, usually three or more points in time	Nominal (three or more linked groups)	Interval/ratio
Pearson's product-moment correlation coefficient	r	Test the existence of a relationship between two variables	Interval/ratio	Interval/ratio

Nonparametric Statistical Tests

Mann-Whitney U test	U	Test the difference in ranks of scores of two independent groups	Nominal	Ordinal/interval/ratio
Kruskal-Wallis test	H	Test the difference in ranks of scores of three or more independent groups	Nominal	Ordinal/interval/ratio
Wilcoxon signed-rank test	Z	Test the difference in ranks of scores of two related or same groups	Nominal	Ordinal/interval/ratio
Chi-square test	χ^2	Test the difference in proportions in two or more independent groups	Nominal	Nominal
Fisher's exact test	-	Test the difference in proportions in a 2×2 table when $N < 30$	Nominal	Nominal
Spearman's rho	ρ	Test that a relationship exists	Ordinal	Ordinal