



SPSS TUTORIAL:

PAIRED SAMPLES t & WILCOXON SIGNED RANKS TESTS

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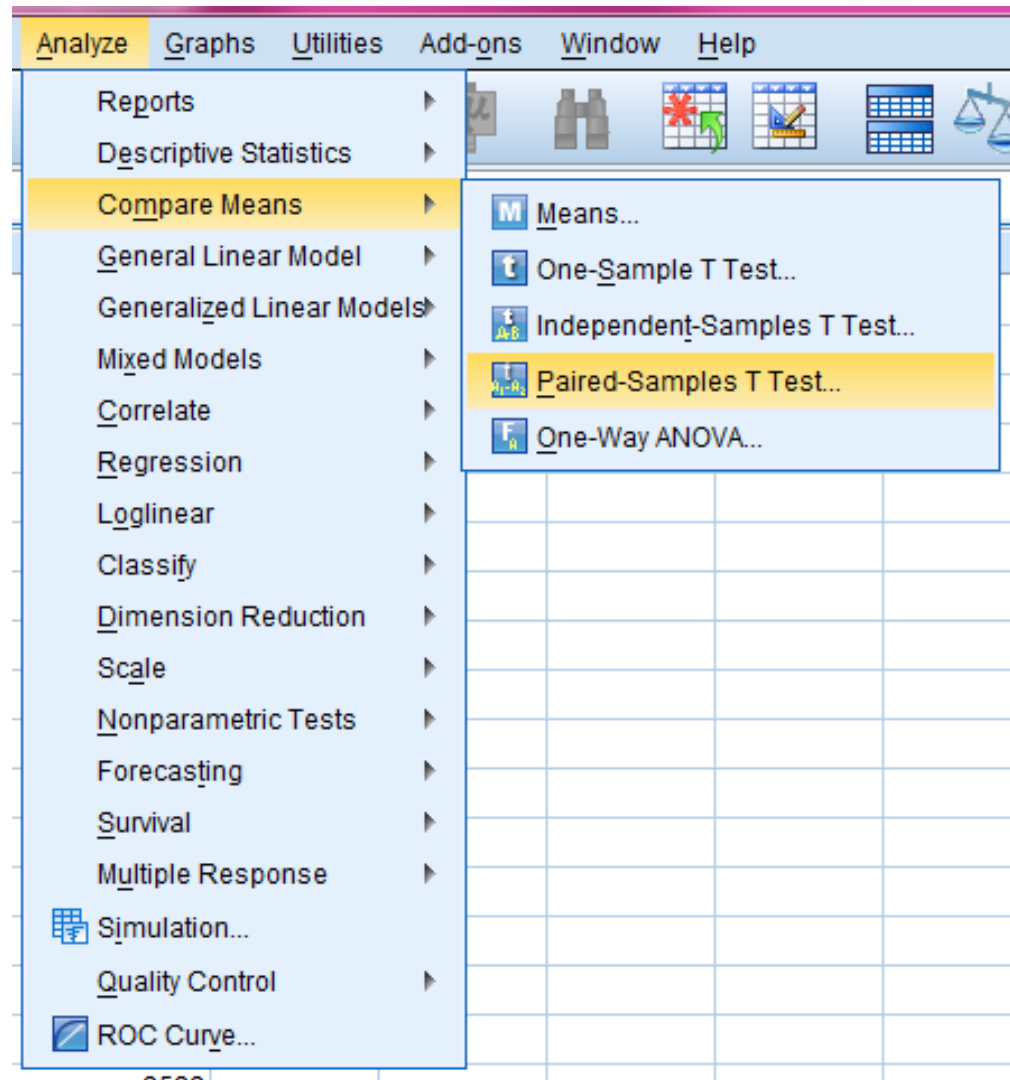
parametric analysis for within-subjects designs

PAIRED SAMPLES t TEST

COMPARE MEANS

Conduct a test to compare the means of two variables within a data file.

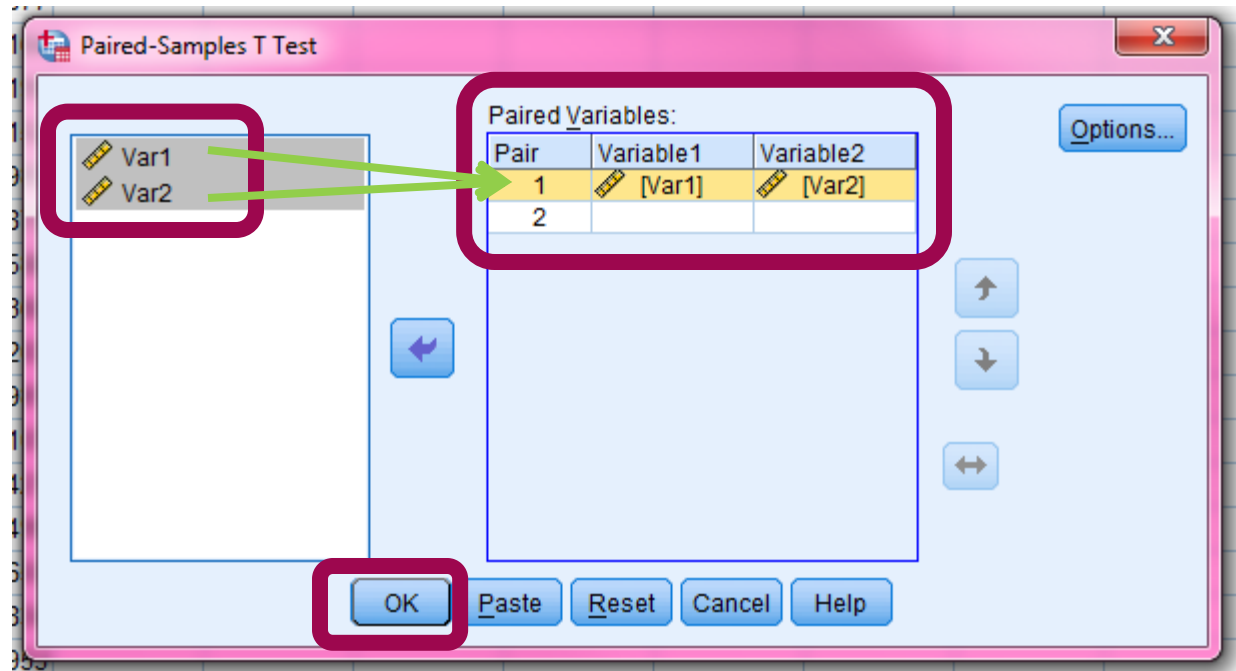
Step 1: From the *Analyze* menu, select *Compare Means* and then *Paired-Samples T Test...*



COMPARE MEANS

Conduct a test to compare the means of two variables within a data file.

Step 2: Select two variables to compare and click the blue arrow to move the pair to the *Paired Variables* area, click on *OK*.



COMPARE VARIANCES, MEANS

If the p (Sig. 2-tailed) value for the t -test statistic is greater than 0.05, the null hypothesis should be retained.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Var1	.500773	50	.2908328	.0411300
	Var2	.986657	50	.3671497	.0519228

	N	Correlation	Sig.
Pair 1 Var1 & Var2	50	.053	.716

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Var1 - Var2	-.4858838	.4562163	.0645187	-.6155390	-.3562285	-7.531	49	.000

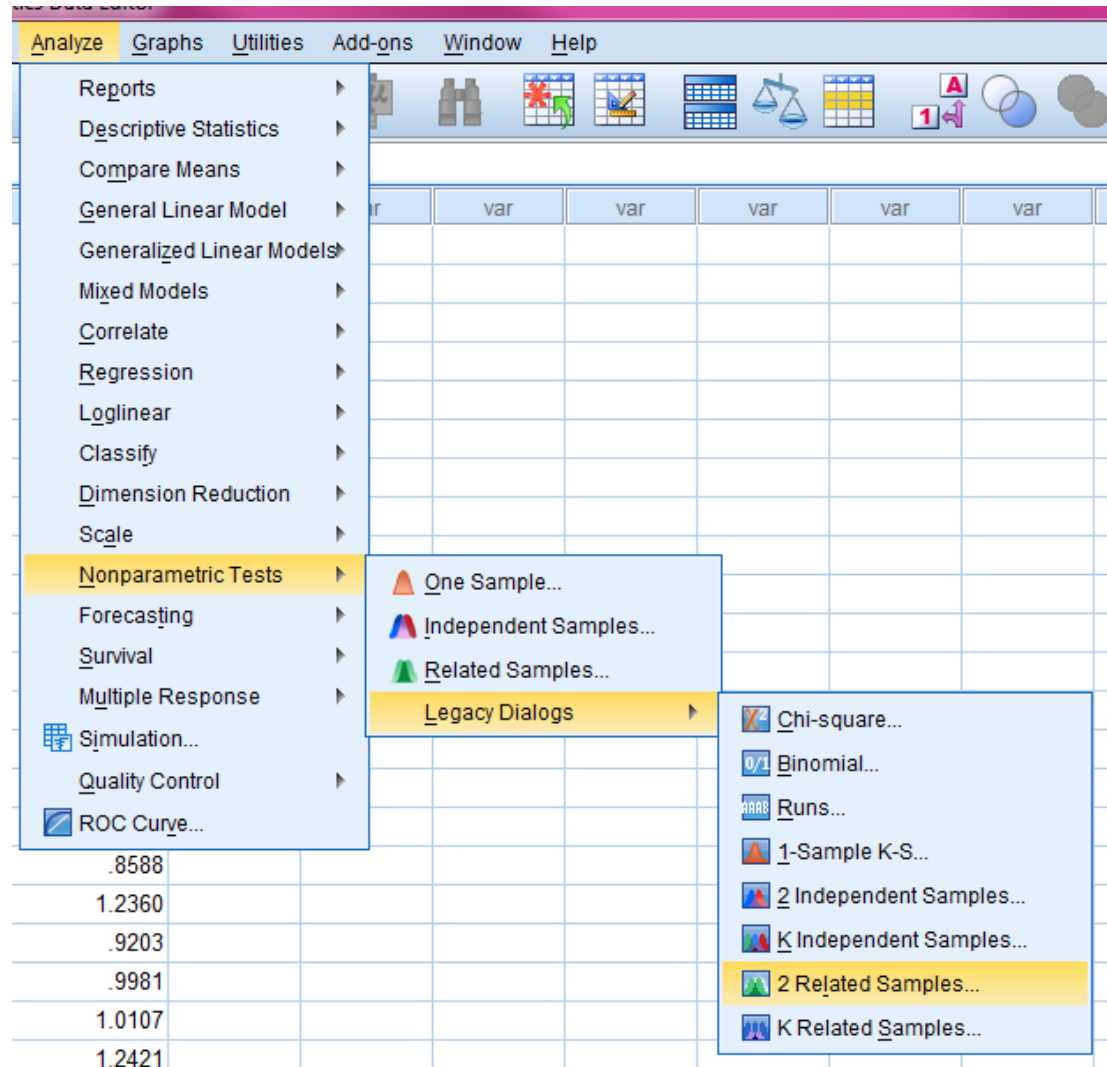
nonparametric analysis for within-subjects designs

WILCOXON SIGNED RANKS TEST

COMPARE RANKS

Conduct a test to compare the ranks of the observations on two variables within the data file.

Step 1: From the *Analyze* menu, select *Nonparametric Tests*, then *Legacy Dialogs*, and then *2 Related Samples...*

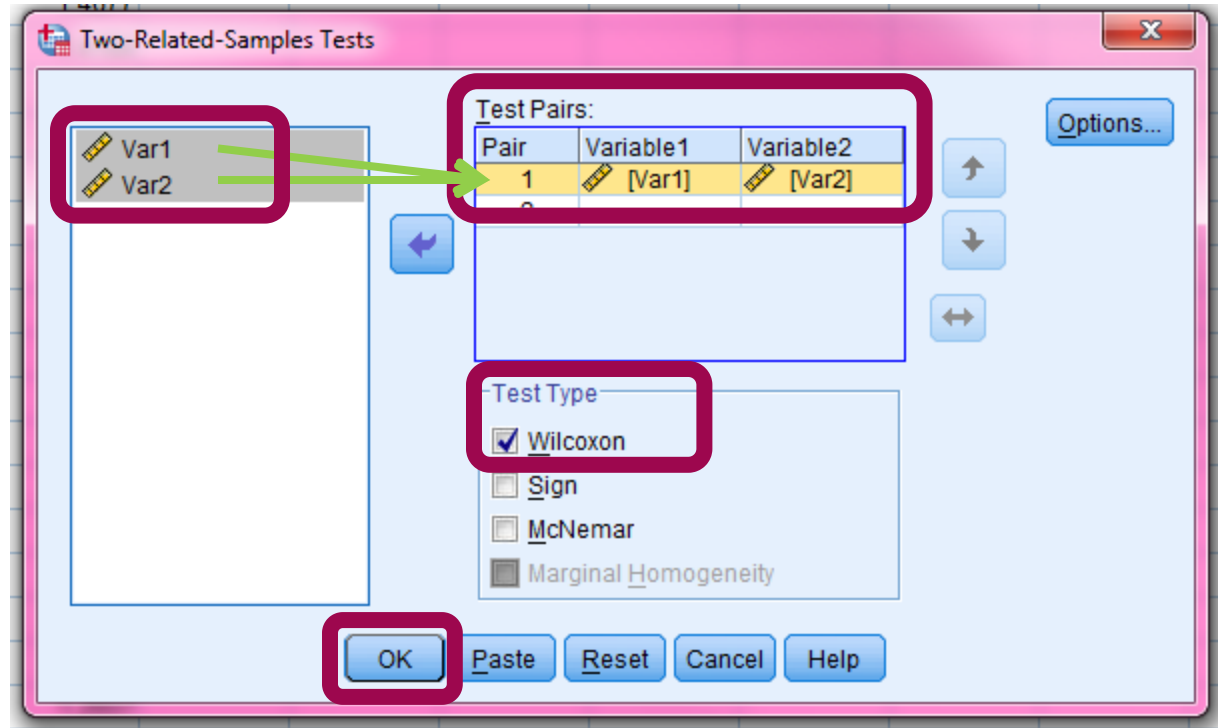


COMPARE RANKS

Conduct a test to compare the ranks of the observations on two variables within the data file.

Step 2: Select two variables to compare and click the blue arrow to move the pair to the *Test Pairs* area

Step 3: Click the check box next to the *Wilcoxon* option in the *Test Type* area of the dialogue box, click on *OK*.



COMPARE RANKS

If the p (Sig. 2-tailed) value for the test statistic is greater than 0.05, the null hypothesis should be retained.

Ranks

	N	Mean Rank	Sum of Ranks
Var2 - Var1 Negative Ranks	6 ^a	16.00	96.00
Positive Ranks	44 ^b	26.80	1179.00
Ties	0 ^c		
Total	50		

a. Var2 < Var1

b. Var2 > Var1

c. Var2 = Var1

Test Statistics^a

	Var2 - Var1
Z	-5.227 ^b
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.