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EDG500

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Lab 13 Step by Step

## T-Test

### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	11.5556	9	2.29734	0.76578
	Posttest	9.6667	9	2.23607	0.74536

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	9	0.527	0.145

### Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	1.88889	2.20479	0.73493	0.19414	3.58364	2.570	8	0.033

Figure 13.7. SPSS Statistics output for the paired-samples *t* test.

Lab 13 Exercise

**T-Test**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	32.8000	10	4.61399	1.45907
	Posttest	34.0000	10	5.05525	1.59861

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	10	0.843	0.002

**Paired Samples Test**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Pretest - Posttest	-1.20000	2.74064	0.86667	-3.16054	0.76054	-1.385	9	0.200

Figure 13.8 SPSS Statistics output for the paired-samples *t* test.

- What is the mean for the pretest? 32.80
- What is the mean for the posttest? 34.00
- What is the value of *t*? -1.39
- What is the associated probability? .20
- Is the difference between the pretest and posttest statistically significant at the .05 level?  
No
- Write a statement of the results of the significance test. The average self-esteem score increased, from 32.80 (*sd* = 4.61) on the pretest to 34.00 (*sd* = 5.06) on the posttest. The difference between the two means is not statistically significant at the .05 level (*t* = -1.39, *df* = 9).