

Carlina E. Lahoz O

EDG 500 Educational Research and Statistics

Professor Bennett Schephen

March 30, 2023

```
T-TEST GROUPS=Groups(1 2)
/MISSING=ANALYSIS
/VARIABLES=Attitude
/CRITERIA=CI(.95).
```

T-Test

Notes

Output Created		29-MAR-2023 23:58:04
Comments		
Input	Data	C:\Users\lahoz\OneDrive\ Pictures\SPSS 14.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	12
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.

Syntax	T-TEST GROUPS=Groups(1 2) /MISSING=ANALYSIS /VARIABLES=Attitude /CRITERIA=CI(.95).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

[DataSet4] C:\Users\lahoz\OneDrive\Pictures\SPSS 14.sav

Group Statistics

	Experimental and Control Group	N	Mean	Std. Deviation	Std. Error Mean
Attitude Toward Drinking and	Experimental Group	7	10.5714	1.61835	.61168
Driving	2.00	5	13.8000	2.28035	1.01980

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Attitude Toward Drinking and	Equal variances assumed	.071	.795	-2.886	10	.016	-3.22857	1.11889	-5.72162	-.73553
Driving	Equal variances not assumed			-2.715	6.808	.031	-3.22857	1.18918	-6.05666	-.40048

T-TEST GROUPS=Group(1 2)
 /MISSING=ANALYSIS
 /VARIABLES=Score
 /CRITERIA=CI(.95).

T-Test

Notes

Output Created	30-MAR-2023 00:29:18	
Comments		
Input	Active Dataset	DataSet6
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	10
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax	T-TEST GROUPS=Group(1 2) /MISSING=ANALYSIS /VARIABLES=Score /CRITERIA=CI(.95).	
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

Group Statistics

	Experimental or Control Group	N	Mean	Std. Deviation	Std. Error Mean
Calculus Final Examination Scores	Experimental Group	5	30.6000	4.87852	2.18174
	Control Group	5	30.8000	3.56371	1.59374

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Calculus Final Examination	Equal variances assumed	.675	.435	-.074	8	.943	-.20000	2.70185	-6.43048	6.03048
Scores	Equal variances not assumed			-.074	7.323	.943	-.20000	2.70185	-6.53222	6.13222

- What is the mean for the experimental group? 30.60
- What is the mean for the control group? 30.80
- What is the value of t? -.074
- What is the associated probability? .435
- Is the difference between the experimental group's mean and the control group's mean statistically significant at the .05 level? The "sig" for Levene's Test is greater than .05 so the t test is the appropriate one to use.
- Write a statement of the results of the significance test.
 At the end of the experiment, the experimental group had low scores in Calculus (m=30.60, sd=4.87) Than the control group (m=30.80, sd=3.5). The difference between the two means is statistically significant at the .05 level (t=-.074, df=8) .