Host

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Type I and Type II Error
Import data

Observed test context

Observed test context
G3 against 10

Descriptives

[TypeErrorData] D:\DATA ANALYSIS\A Basic Descriptive Statistics Guides\Type I and Type II Error\SPSS_Output\sav\Type-I-and-Type-II-Error-data.sav

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Final grade	649	0	19	11.91	3.231
Valid N (listwise)	649				

Hypothesis decision

Hypothesis decision
p value and alpha

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Final grade	649	11.91	3.231	.127

One-Sample Test

	Test Value = 10					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Final grade	15.030	648	.000	1.906	1.66	2.16

Dataset Activate

Warnings

Dataset ErrorMatrix has no data.
Execution of this command stops.

Decision matrix

Decision matrix
Error types

List

Decision matrix
Error types

truth	decision	type_i_error	type_ii_error	correct_decision
.00	.00	.00	.00	1.00
.	1.00	.	.00	.
1.00	.00	.00	1.00	.00
.	1.00	.	.00	.

Number of cases read: 4 Number of cases listed: 4

False positive context

False positive context
Group test example

T-Test

Group Statistics

	Sex group	N	Mean	Std. Deviation	Std. Error Mean
Final grade	F	383	12.25	3.124	.160
	M	266	11.41	3.321	.204

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Final grade	Equal variances assumed	.004	.950	3.311	647
	Equal variances not assumed			3.275	547.439

Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
Final grade	Equal variances assumed	.001	.847	.256
	Equal variances not assumed	.001	.847	.259

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
Final grade	Equal variances assumed	.345	1.350
	Equal variances not assumed	.339	1.355

Power context

Correlations

Correlations

		Second period grade	Final grade
Second period grade	Pearson Correlation	1	.919**
	Sig. (2-tailed)		.000
	N	649	649
Final grade	Pearson Correlation	.919**	1
	Sig. (2-tailed)	.000	
	N	649	649

**. Correlation is significant at the 0.01 level (2-tailed).