

Análisis estadístico con Jamovi aplicado a Enfermería y CAFE

Parte IV: ANOVA y Regresión

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ANOVA

- 1 vía
 - Posthoc
- 2 vías
 - Interacciones

ANOVA

Hipótesis: Vitamina C y rendimiento: efecto en el umbral de lactato y consumo de oxígeno del corazón.

Experimento: aumento en umbral de lactato (%) en 60 atletas que recibieron tres dosis de vitamina C (0.5, 1, and 2 mg/dia) y dos métodos de administración distintos: zumo de naranja (OJ) o ácido ascórbico (VC)

Datos: vitaminaC.txt (lact, supl, dosis)

ANOVA

ANOVA



dosis



Effect Size

☐ η^2 ☐ partial η^2 ☐ ω^2

> | Model

> | Assumption Checks

> | Contrasts

> | Post Hoc Tests

▼ | Descriptive Plots

Horizontal axis



dosis

Separate lines



supl

Separate plots

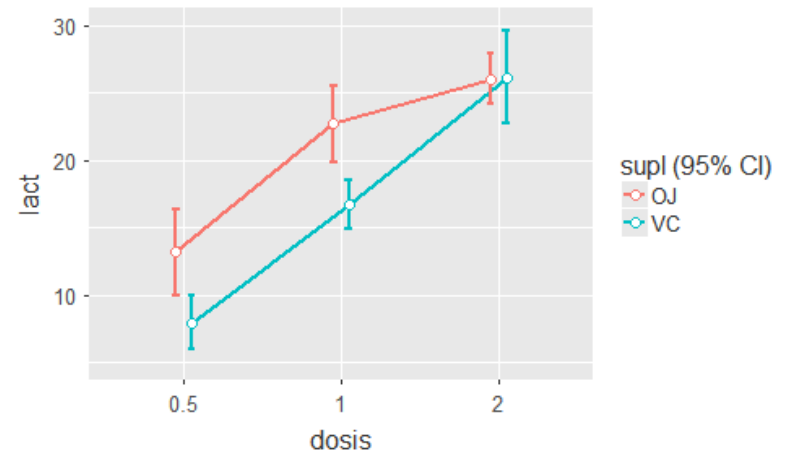


ANOVA

ANOVA

	Sum of Squares	df	Mean Square	F	p
supl	205	1	205.4	15.57	< .001
dosis	2426	2	1213.2	92.00	< .001
supl * dosis	108	2	54.2	4.11	0.022
Residuals	712	54	13.2		

Descriptive Plot





Asunciones


≡


Data


Analyses


 Exploration


 T-Tests

 ANOVA


 Regression

 Frequencies

 Factor

 Base R

ANOVA

 dosis

Effect Size

☐ η^2 ☐ partial η^2 ☐ ω^2

> | Model

▼ | Assumption Checks

☐ Homogeneity tests

☒ Q-Q plot of residuals

> | Contrasts

> | Post Hoc Tests

> | Descriptive Plots

> | Additional Options

	Sum of Squares	df	Mean Square	F	p
supl	205	1	205.4	15.57	< .001
dosis	2426	2	1213.2	92.00	< .001
supl * dosis	108	2	54.2	4.11	0.022
Residuals	712	54	13.2		

Assumption Checks

Q-Q Plot



Test homogeneidad

The screenshot shows the Jamovi software interface. The top menu bar includes 'Data' and 'Analyses'. The 'Data' menu is open, showing options like 'Paste', 'Setup', 'Compute', 'Add', 'Delete', 'Filters', and 'Rows'. The 'Data Variable' dialog box is open, showing the variable 'dosis' with a description field. The variable is set to 'Nominal Text' (indicated by a radio button). A list of levels is shown: 0.5, 1.0, and 2.0. There are navigation arrows (left, right, up, down) around the levels list. At the bottom, a data table is visible with columns 'lact', 'supl', and 'dosis'. The 'dosis' column is highlighted. The table contains four rows of data.

	lact	supl	dosis
1	4.2	VC	0.5
2	11.5	VC	0.5
3	7.3	VC	0.5
4	5.8	VC	0.5

ANNOVA

ANNOVA

Test homogeneidad

ANOVA

Effect Size

☐ η^2 ☐ partial η^2 ☐ ω^2

> Model

> Assumption Checks

> Contrasts

▼ Post Hoc Tests

→

supl
dosis
supl * dosis

Correction

☐ No correction

☒ Tukey

☐ Scheffe

☐ Bonferroni

supl * dosis	108	2	54.2	4.11	0.022	
Residuals	712	54	13.2			

Post Hoc Tests

Post Hoc Comparisons - supl

Comparison						
supl	supl	Mean Difference	SE	df	t	Ptukey
OJ	- VC	3.70	0.938	54.0	3.95	< .001

Post Hoc Comparisons - dosis

Comparison						
dosis	dosis	Mean Difference	SE	df	t	Ptukey
0.5	- 1.0	-9.13	1.15	54.0	-7.95	< .001
	- 2.0	-15.50	1.15	54.0	-13.49	< .001
1.0	- 2.0	-6.37	1.15	54.0	-5.54	< .001

Post Hoc Comparisons - supl * dosis

Comparison								
supl	dosis	supl	dosis	Mean Difference	SE	df	t	p
OJ	0.5	- OJ	1.0	-9.4700	1.62	54.0	-5.8312	
		- OJ	2.0	-12.8300	1.62	54.0	-7.9002	
		- VC	0.5	5.2500	1.62	54.0	3.2327	
		- VC	1.0	-3.5400	1.62	54.0	-2.1798	
		- VC	2.0	-12.9100	1.62	54.0	-7.9494	
	1.0	- OJ	2.0	-3.3600	1.62	54.0	-2.0689	

Regresión

lineal

logística

multinomial

The screenshot shows the SPSS software interface. The 'Analyses' menu is open, and the 'Regression' option is selected, which has opened a sub-menu. In the sub-menu, 'Linear Regression' is highlighted. The background shows a data table with columns 'ident', 'pais', 'niveledu', and 'fumar'. Red arrows point from the text labels on the left to specific options in the menu: 'lineal' points to 'Linear Regression', 'logística' points to 'Logistic Regression', and 'multinomial' points to 'N Outcomes Multinomial'.

	ident	pais		niveledu	fumar	
1	10001	Brasil		64	primaria	ex-fuma
2	10002	Brasil		51	primaria	fumador
3	10003	Brasil		48	ninguno	fumador
4	10004	Brasil		49	ninguno	no fuma
5	10005	Brasil		41	primaria	no fuma
6	10006	Brasil		45	primaria	fumador
7	10007	Brasil		51	primaria	no fuma
8	10008	Brasil	Caso	42	primaria	ex-fuma
9	10009	Brasil	Control	58	primaria	no fuma
10	10010	Brasil	Caso	76	secundaria	no fuma

Analyses menu options:

- Correlation Matrix
- Linear Regression
- Logistic Regression
 - 2 Outcomes Binomial
 - N Outcomes Multinomial