Results

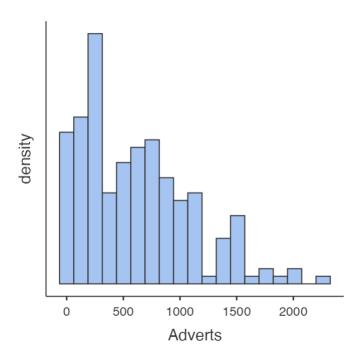
Descriptives

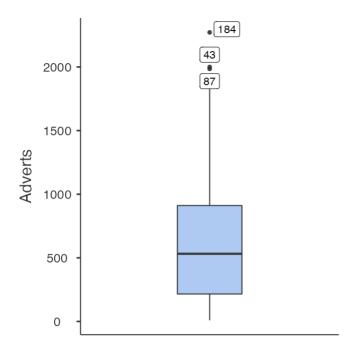
Descriptives

	Adverts	Sales	Airplay	Image
N	200	200	200	200
Missing	0	0	0	0
Mean	614	193	27.5	6.77
Median	532	200	28.0	7.00
Standard deviation	486	80.7	12.3	1.40
Minimum	9.10	10.0	0.00	1.00
Maximum	2272	360	63.0	10.0

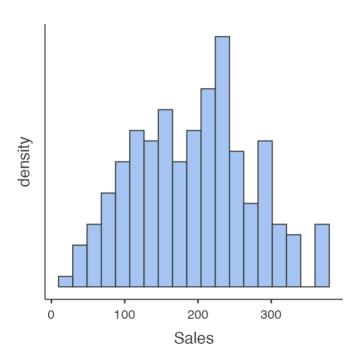
Plots

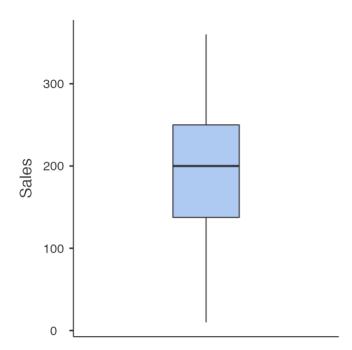
Adverts



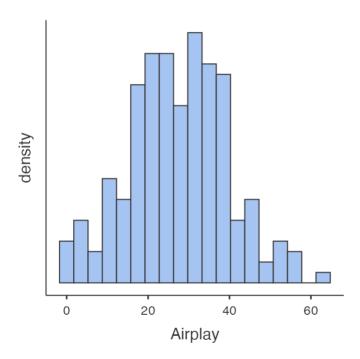


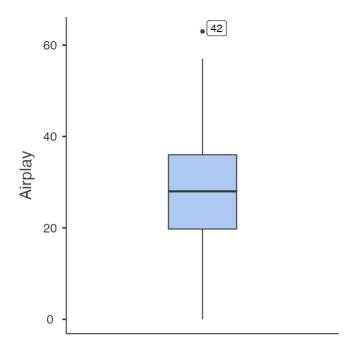
Sales



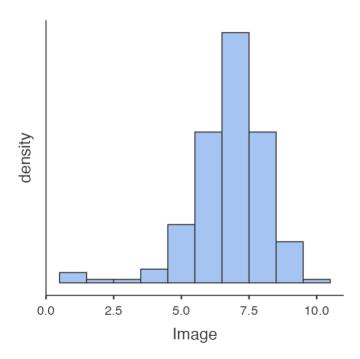


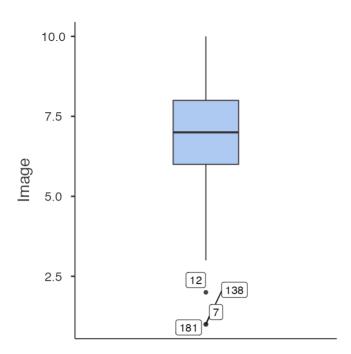
Airplay





Image





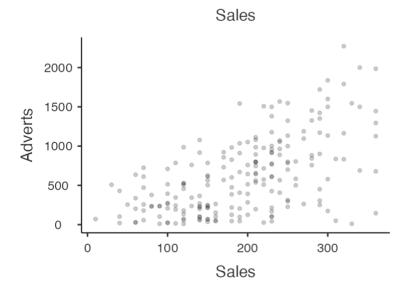
Relationships, Prediction, and Group Comparisons

You have entered a numeric variable for Variable 1 / Dependent Variable and a numeric variable for Variable 2 / Independent Variables. Hence, the <u>Pearson correlation coefficient</u>, which is a measure for the strength of the linear relationship between two variables, seems to be a good option for you! In order to run this analysis in jamovi, go to: Regression > Correlation Matrix

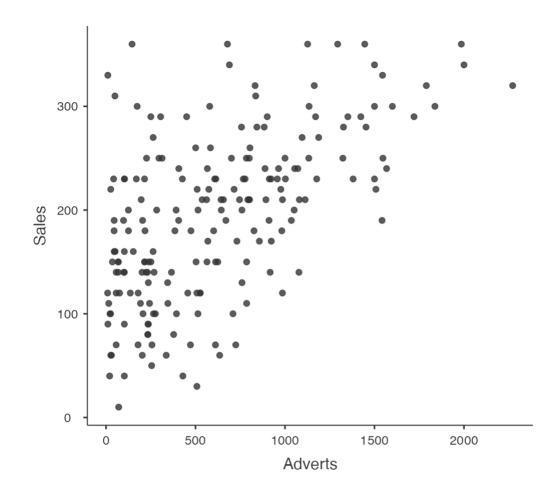
- Drop your two variables in the white box at the right
- Under Correlation Coefficients, select Pearson (selected by default)
- Under Hypothesis, select your alternative hypothesis

Alternatively, you could perform a <u>linear regression analysis</u>. The test outcomes of both methods will be equivalent. Click on the links to learn more about these methods!

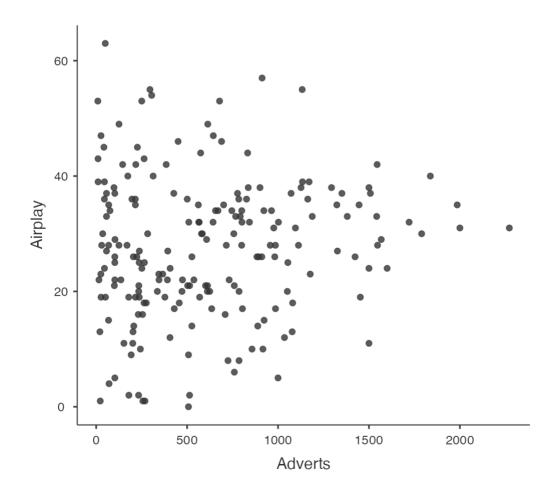
Scatter Plots of Bivariate Relationships - Dependent/Independent Variables



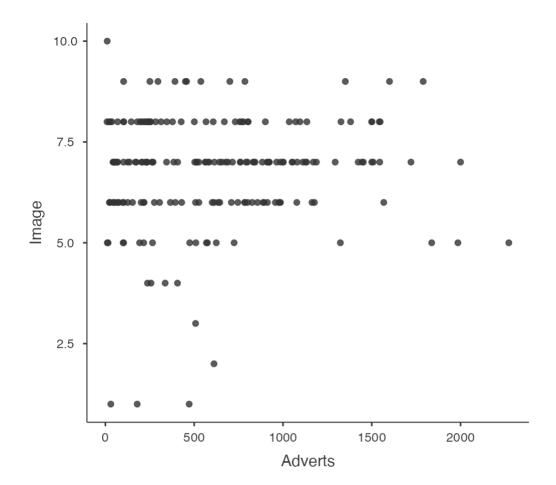
Scatterplot



Scatterplot



Scatterplot



Correlation Matrix

Correlation Matrix

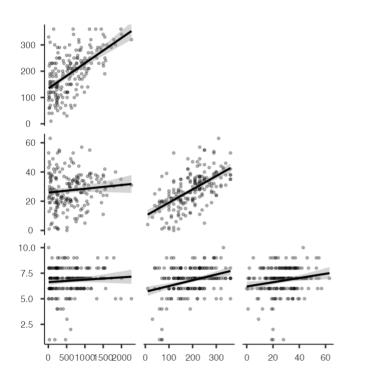
		Adverts	Sales	Airplay	Image
Adverts	Pearson's r p-value	_			
Sales	Pearson's r p-value	0.578 <.001			
Airplay	Pearson's r p-value	0.102 0.151	0.599 <.001	_ _	
Image	Pearson's r p-value	0.081 0.256	0.326 <.001	0.182 0.010	_ _

Plot

Adverts Sales Airplay

Adverts

Image



Sales

Airplay

Image

Linear Regression

Model Fit Measures

				Overall Model Test			
Model	R	\mathbb{R}^2	Adjusted R ²	F	df1	df2	р
1	0.578	0.335	0.331	99.6	1	198	<.001

Omnibus ANOVA Test

	Sum of Squares	df	Mean Square	F	р
Adverts	433688	1	433688	99.6	<.001
Residuals	862264	198	4355		

Note. Type 3 sum of squares

[3]

Model Coefficients - Sales

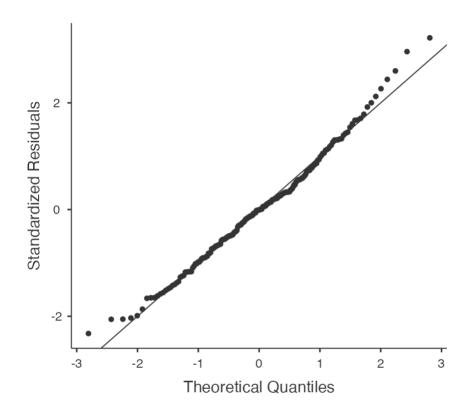
			95% Confide			
Predictor	Estimate	SE	Lower	Upper	t	р
Intercept	134.1399	7.53657	119.2777	149.002	17.80	<.001
Adverts	0.0961	0.00963	0.0771	0.115	9.98	<.001

Assumption Checks

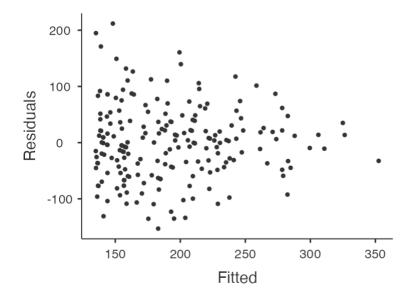
Normality Test (Shapiro-Wilk)

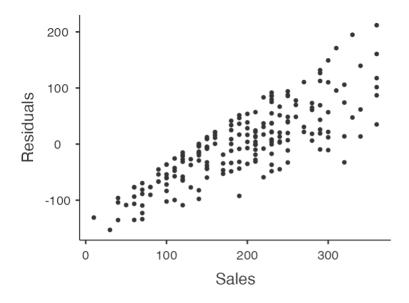
Statistic	р			
0.990	0.176			

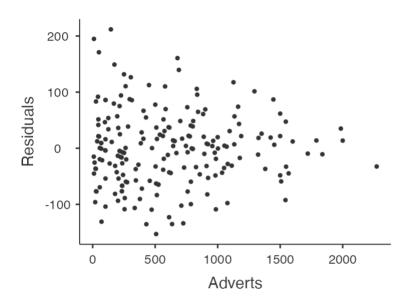
Q-Q Plot



Residuals Plots







References

[1] The jamovi project (2022). jamovi. (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org.

[2] R Core Team (2021). R: A Language and environment for statistical computing. (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).

[3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from https://cran.r-project.org/package=car.