# Results

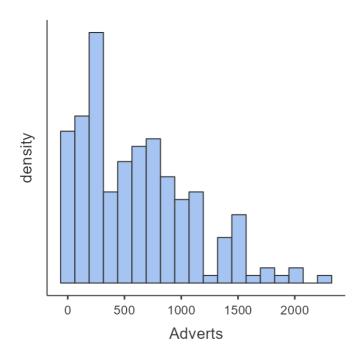
# **Descriptives**

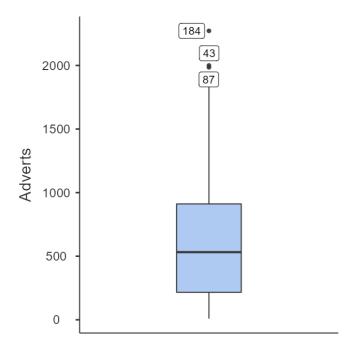
### Descriptives

	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
Skewness	0.853	0.0439	0.0597	-1.29
Std. error skewness	0.172	0.172	0.172	0.172
Kurtosis	0.236	-0.680	-0.0342	3.74
Std. error kurtosis	0.342	0.342	0.342	0.342
Shapiro-Wilk W	0.925	0.985	0.993	0.877
Shapiro-Wilk p	< .001	0.030	0.408	< .001

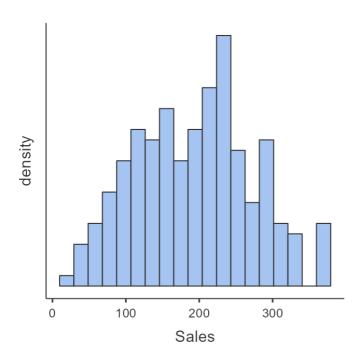
### **Plots**

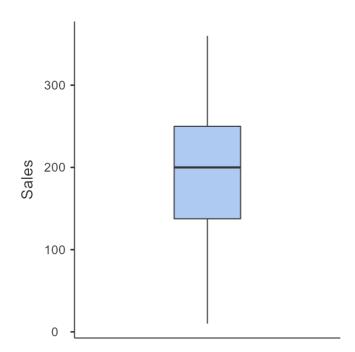
#### **Adverts**



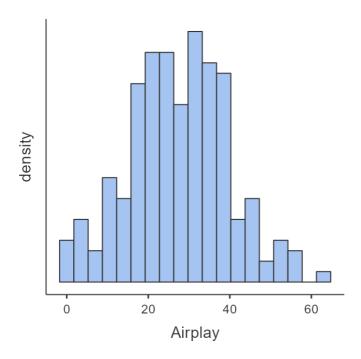


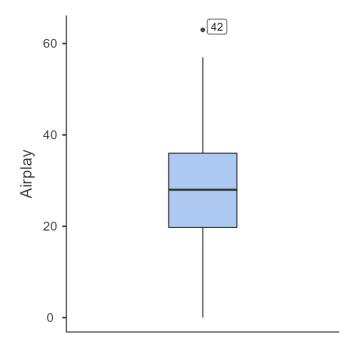
### Sales



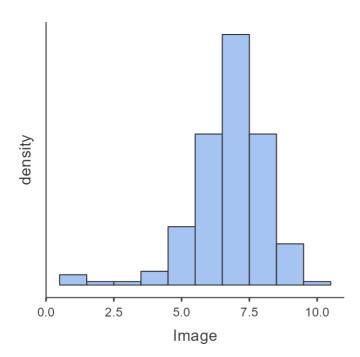


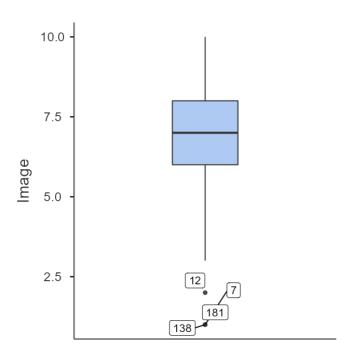
## Airplay





## Image





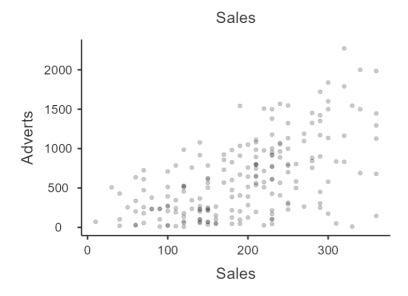
### **Relationships, Prediction, and Group Comparisons**

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

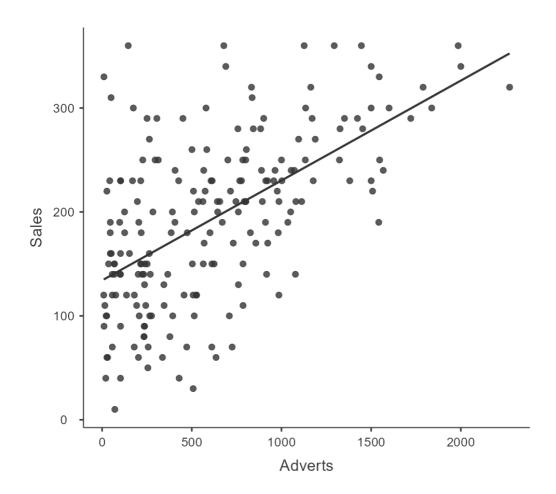
- Drop your two variables in the white box at the right
- Under Correlation Coefficients, select Pearson (selected by default)
- Under Hypothesis, select your alternative hypothesis

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!

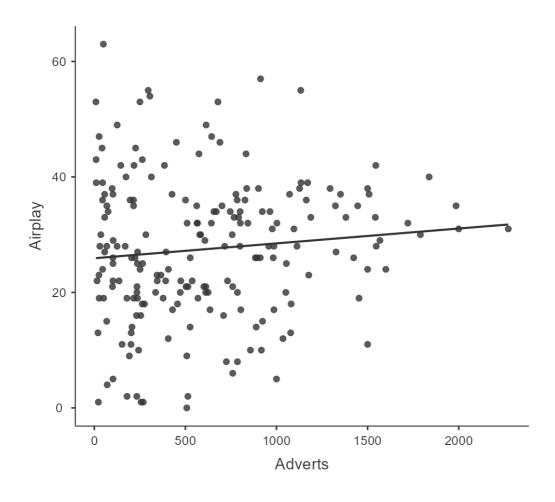
#### **Scatter Plots of Bivariate Relationships - Dependent/Independent Variables**



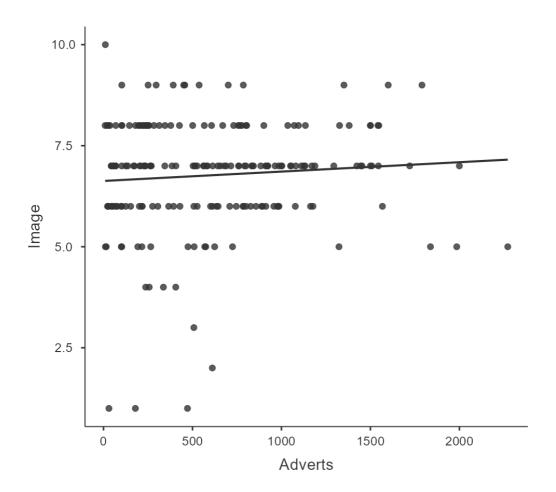
### **Scatterplot**



# Scatterplot



# Scatterplot



## **Correlation Matrix**

#### Correlation Matrix

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

*Note.* \* p < .05, \*\* p < .01, \*\*\* p < .001

### **Correlation Matrix**

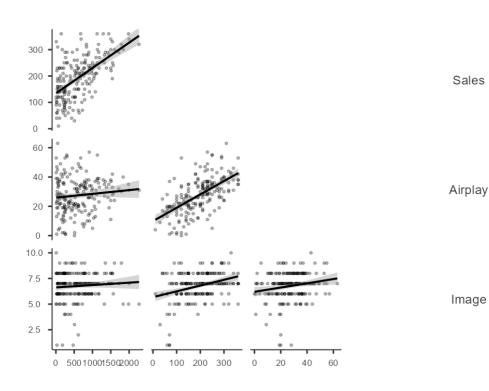
		Adverts	Sales	Airplay	Image
Adverts	Pearson's r p-value	<u> </u>			
Sales	Pearson's r p-value	0.578 *** < .001			
Airplay	Pearson's r p-value	0.102 0.151	0.599 *** < .001	_ _	
Image	Pearson's r p-value	0.081 0.256	0.326 *** < .001	0.182 ** 0.010	_ _

*Note.* \* p < .05, \*\* p < .01, \*\*\* p < .001

### Plot

Adverts Sales Airplay Image

Adverts



# **Linear Regression**

Model Fit Measures

				<b>Overall Model Test</b>			
Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	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

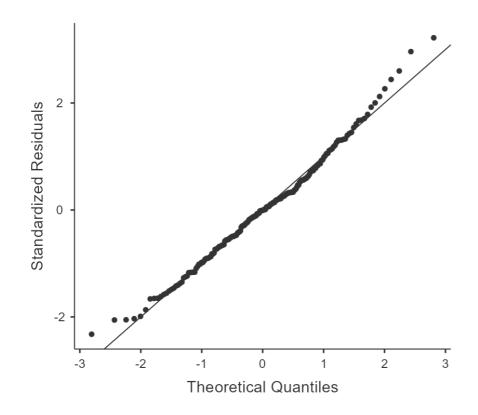
			95% Confidence Interval				
Predictor	Estimate	SE	Lower	Upper	t	р	Stand. Estimate
Intercept	134.1399	7.53657	119.2777	149.002	17.80	< .001	
Adverts	0.0961	0.00963	0.0771	0.115	9.98	< .001	0.578

### **Assumption Checks**

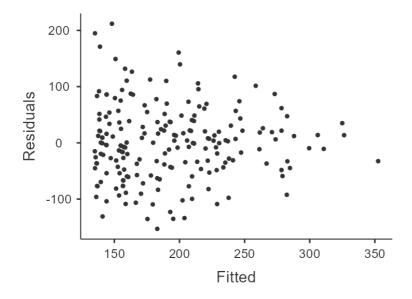
Normality Test (Shapiro-Wilk)

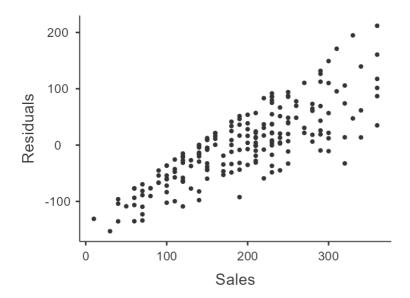
Statistic	р
0.990	0.176

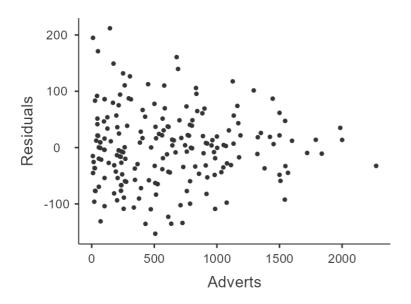
#### Q-Q Plot



#### **Residuals Plots**







## References

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

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