## **Results**

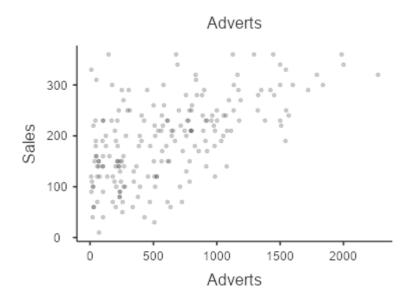
# **Relationships, Prediction, and Group Comparisons**

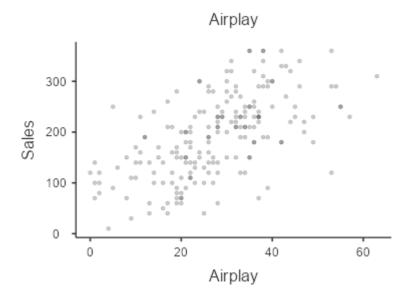
You have entered a numeric dependent variable and several numeric independent variables. Hence, <u>linear regression analysis</u> seems to be a good option for you! In order to run this analysis in jamovi, go to: Regression > Linear Regression

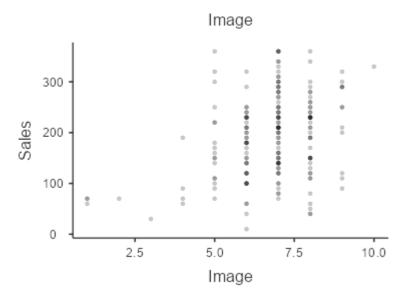
- Drop your dependent variable in the box below Dependent Variable
- Drop your independent variables in the box below Covariates

Click on the link to learn more about this method!

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







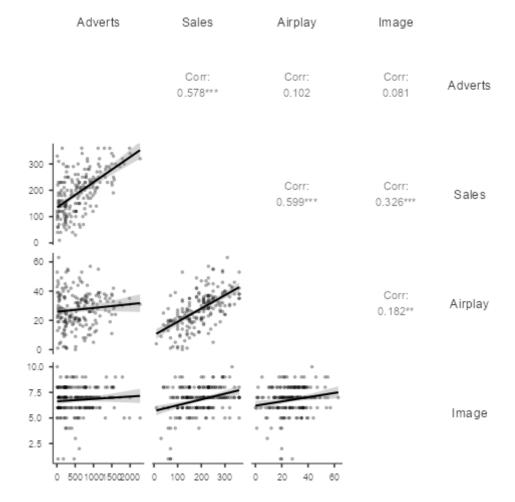
# **Correlation Matrix**

#### Correlation Matrix

		Adverts	Sales	Airplay	Image
Adverts	Pearson's r	_			
	p-value	_			
	N	_			
Sales	Pearson's r	0.578 ***	_		
	p-value	< .001	_		
	N	200	_		
Airplay	Pearson's r	0.102	0.599 ***	_	
	p-value	0.151	< .001	_	
	N	200	200	_	
Image	Pearson's r	0.081	0.326 ***	0.182 **	_
	p-value	0.256	< .001	0.010	_
	N	200	200	200	

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

# Plot



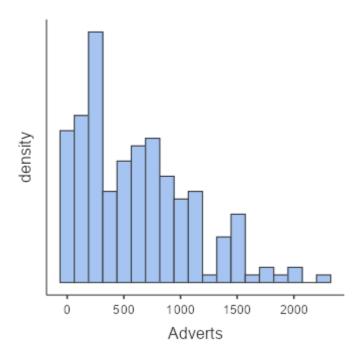
# **Descriptives**

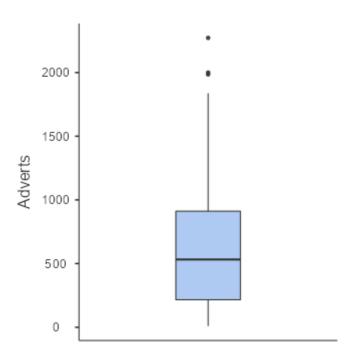
## Descriptives

	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

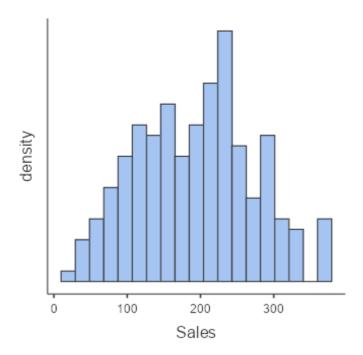
## **Plots**

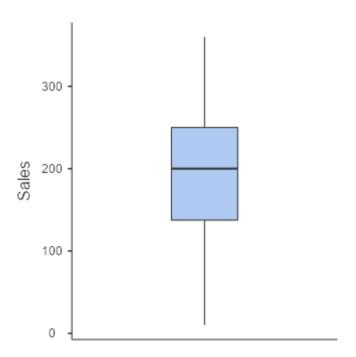
**Adverts** 



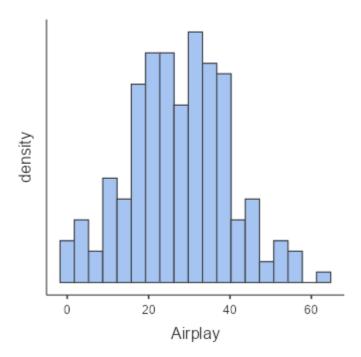


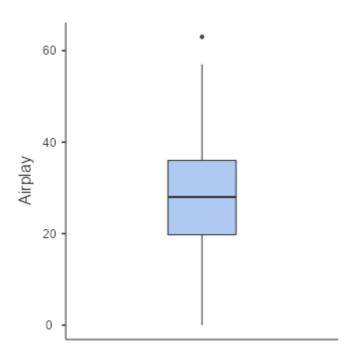
Sales



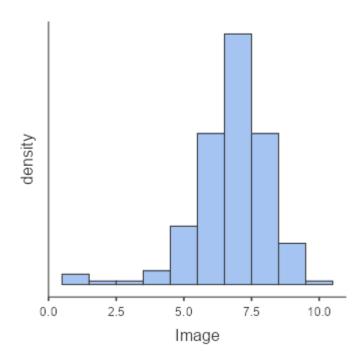


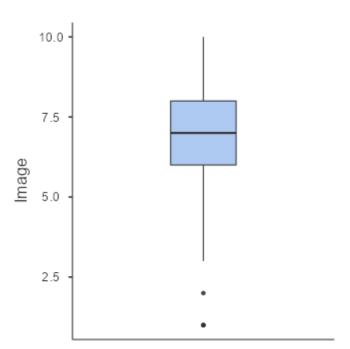
Airplay





Image





# **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
2	0.815	0.665	0.660	129.5	3	196	< .001

#### **Model Comparisons**

	Model Model   1 - 2							
	Model		Model	$\Delta R^2$	F	df1	df2	р
-	1	-	2	0.330	96.4	2	196	< .001

# **Model Specific ResultsModel 1Model 2**

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

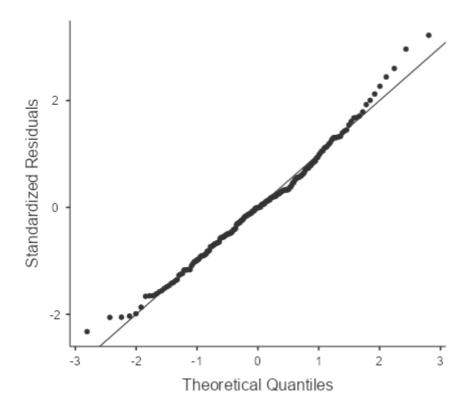
[3]

Model Coefficients - Sales

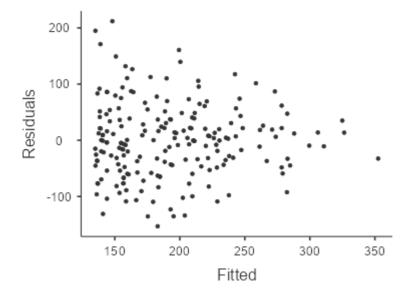
				95% Confidence Interval					nfidence erval
Predictor	Estimate	SE	Lower	Upper	t	р	Stand. Estimate	Lower	Upper
Intercept Adverts	134.1399 0.0961	7.53657 0.00963	119.2777 0.0771	149.002 0.115	17.80 9.98	< .001 < .001	0.578	0.464	0.693

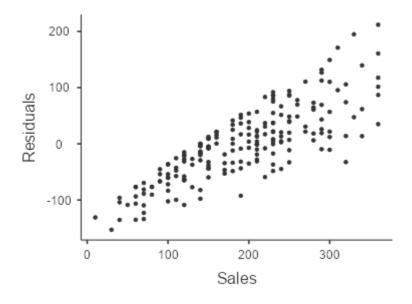
## **Assumption Checks**

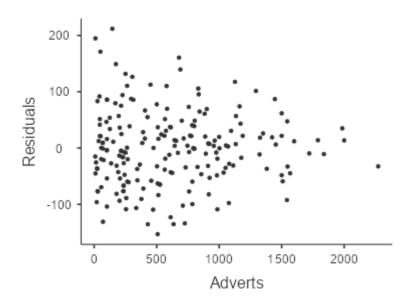
**Q-Q Plot** 



# **Residuals Plots**







## Omnibus ANOVA Test

	Sum of Squares	df	Mean Square	F	р
Adverts	333332	1	333332	150.3	< .001
Airplay	325860	1	325860	147.0	< .001
Image	45853	1	45853	20.7	< .001
Residuals	434575	196	2217		

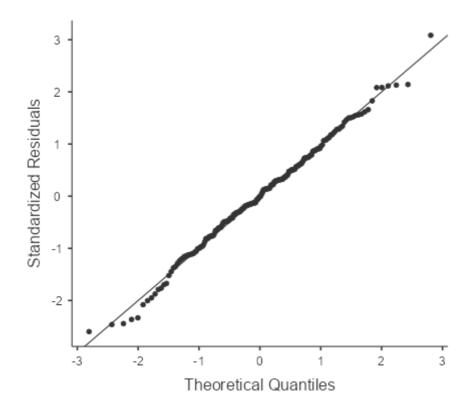
Note. Type 3 sum of squares

[3]

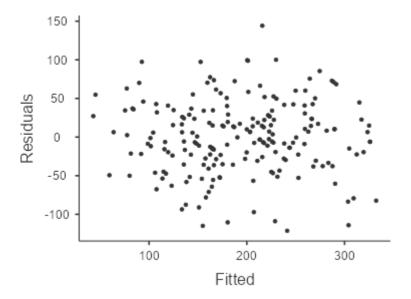
			95% Con Inter						nfidence erval
Predictor	Estimate	SE	Lower	Upper	t	р	Stand. Estimate	Lower	Upper
Intercept	-26.6130	17.35000	-60.8296	7.6037	-1.53	0.127			
Adverts	0.0849	0.00692	0.0712	0.0985	12.26	< .001	0.511	0.429	0.593
Airplay	3.3674	0.27777	2.8196	3.9152	12.12	< .001	0.512	0.429	0.595
Image	11.0863	2.43785	6.2786	15.8941	4.55	< .001	0.192	0.109	0.275

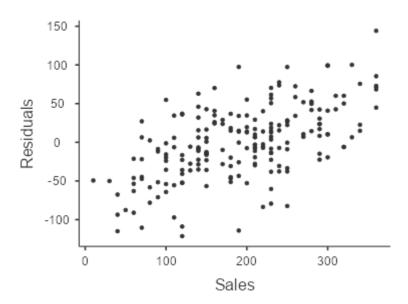
# **Assumption Checks**

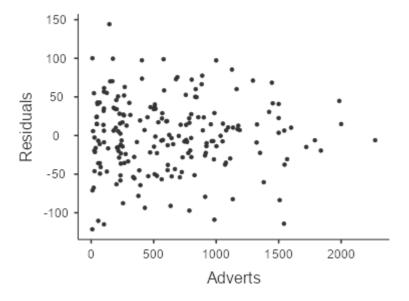
## Q-Q Plot

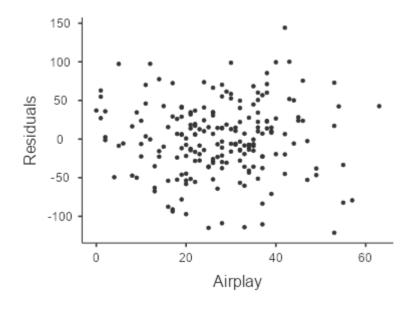


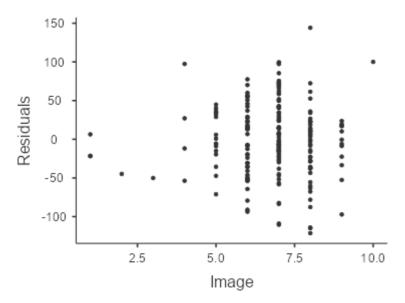
## **Residuals Plots**











# References

[1] The jamovi project (2021). jamovi. (Version 2.2) [Computer Software]. Retrieved from <a href="https://www.jamovi.org">https://www.jamovi.org</a>.

[2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.0) [Computer software]. Retrieved from <a href="https://cran.r-project.org">https://cran.r-project.org</a>. (R packages retrieved from MRAN snapshot 2021-04-01).

[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>.