

**You**

how rsquare is ccalculated for a model

**ChatGPT**

R-squared ( $R^2$ ) is a statistical measure that represents the proportion of the variance in the dependent variable that is explained by the independent variables in a regression model. It is also known as the coefficient of determination.

The formula to calculate R-squared is:

$$R^2 = 1 - \frac{SS_{res}}{SS_{tot}}$$

Where:

- $SS_{res}$  is the sum of squares of residuals (or errors), which represents the difference between the actual values of the dependent variable and the predicted values by the model.
- $SS_{tot}$  is the total sum of squares, which represents the total variance of the dependent variable around its mean.

In simpler terms, R-squared measures how well the independent variables explain the variability of the dependent variable. An R-squared value closer to 1 indicates that a larger proportion of the variance in the dependent variable is explained by the independent variables, while an R-squared value closer to 0 indicates that the independent variables do not explain much of the variance in the dependent variable.

Keep in mind that R-squared alone might not be sufficient to fully evaluate the goodness of fit of a model, and it should be used in conjunction with other metrics and analysis techniques.



Message ChatGPT...



ChatGPT can make mistakes. Consider checking important information.