## **STEP 2**



## **STEP 3**

**Is LN\_IHFW statistically significant at the 5% level?**

The p-value is 0.000552084 which is less than the significance level which is 0.05. This implies that the variable LN\_IHFW is statistically significant at the 5% level.

**What is the interpretation of the coefficient on LN\_IHFW?**

If household net financial wealth increases by 1%, life satisfaction increases by 0.000552084%.

**Did adding LN\_JS improve the model fit?**

Yes, it improved the model fit. The new adjusted R-squared is 0.500315088.

**Is LN\_JS statistically significant at the 5% level?**

The p-value is 0.000158208 which is less than the significance level which is 0.05. This implies that the variable LN\_JS is statistically significant at the 5% level.

**What has happened to the coefficient on LN\_IHFW? Has it changed?**

The coefficient has changed to from 0.069591742 to 0.039996551.

## **STEP 4**

**What is the value of the adjusted R-squared?**

The value is 0.60954738.

**Does your model “pass” the F-test?**

The significance of F is 0.0000185261142879531 which is less than our significance level. Thus, the model passes the F-test.

**Is the coefficient on LN\_SART statistically significant at the 5% level?**

The p-value is 0.026998715 which is less than the significance level. This implies that LN\_SART is statistically significant at the 5% level.

**Is the coefficient on LN\_JER statistically significant at the 5% level?**

The p-value is 0.107760208 which is greater than the significance level. This implies that LN\_JER is not statistically significant at the 5% level.

**What is the interpretation of the coefficient on LN\_VAP?**

If the air pollution increases by 1%, life satisfaction decreases by 0.024562471%.

## **STEP 5**





The variables that are fairly correlated with LN\_JLRU are LN\_SHR and LN\_WE.

**Did the adjusted R-squared statistic improve? What is it now?**

The adjusted R-squared changed from 0.60954738 to 0.619911422. Thus, it improved.

**What happened to the coefficients and the p-values of the variables that were highly correlated with LN\_JLRU (in your list from step 5a)? Did they become more significant?**

Before:





After:





The coefficients changed slightly. The variable that is the most correlated with LN\_JLRU is LN\_WE. LN\_WE became less significant. Meanwhile, the variable LN\_SHR became more significant.

## **STEP 6**

After removing LN\_JLRU, LN\_WE, and LN\_VAP, I found what I believe is the best fitting model.





If the assault rate increases by 1%, life satisfaction increases by 0.333100404%.