

## Regression Analysis Worksheet

(R.A.W.)

11.7.15

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1. Literacy (People who read %) and AIDS cases:

Correlation

	<i>literacy</i>	<i>aids</i>
<i>literacy</i>	1	
<i>aids</i>	0.1538383612	1

Figure 1: Correlation between Literacy (people who read %) and the number of AIDS cases. According to this model, there is a weak correlation (+/- .1) between literacy and cases of AIDES.

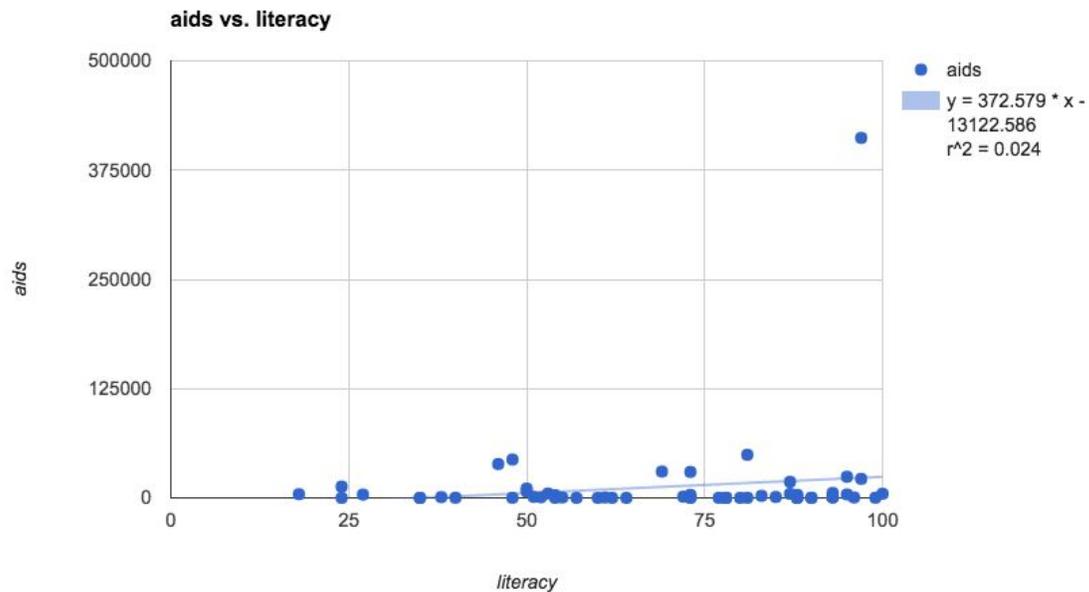


Figure 2: ScatterPlot: According to this scatterplot, there is no correlation between literacy and cases of Aides.

SUMMARY OUTPUT	
<i>Regression Statistics</i>	
Multiple R	0.1538383612
R Square	0.02366624137
Observations	59

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-13122.58644	23142.72528	-0.5670285711	0.5729211273	-59465.09315	33219.92026	-59465.09315	33219.92026
literacy	372.5791962	316.9681915	1.175446642	0.2447026866	-262.1386412	1007.297034	-262.1386412	1007.297034

$$y = 372.6x - 13122.59$$

Slope interpretation - Every unit increase in cases of AIDS results in a 372.6 increase in literacy.

Value of the slope is 372.6.

372.5791962 represents the point increase in literacy (whatever and however that is measured) as the percentage literacy increases

coefficient determination	0.02366624137	2.37% change in Aids rate is due to literacy			
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Coefficient determination was determined by squaring the correlation.