

What Causes Intentional Homicide and How Can We Stop It

One of the biggest problems for countries with undeveloped economies is homicide. When the resources necessary for survival are low, the characteristics necessary for a functional society begin to break down. One such characteristic is trust, particularly trust of other members of society to not violently harm others.

Intentional Homicides per 100000 People in 2015

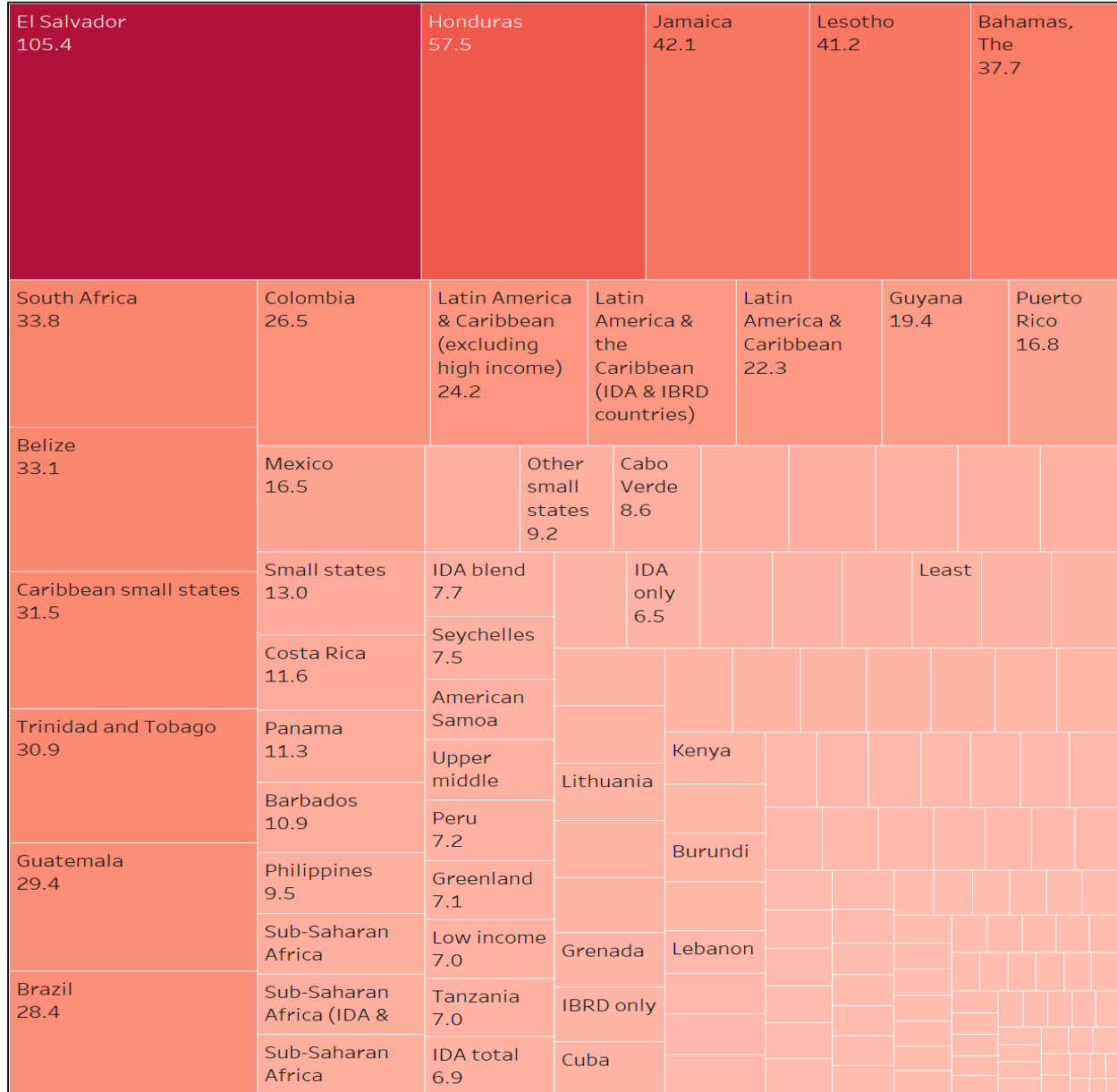


Figure 1: This diagram shows the rates of homicide for each country, with the highest rates of homicide at the top and to the left. A trend can be seen that many countries in Latin America and Africa have the highest rates of homicide. Source¹

The causes of high levels of homicide in large populations has been well documented. The biggest driver for intentional homicide, outside of international warfare, is economic inequalityⁱⁱ, specifically income inequality. Many measures have been developed to determine the levels of income inequality, with the Palma index perhaps being the best one. However, the GINI index is also a generally acceptable indicator of income inequality, and most countries have better data for the GINI index.

Global Heatmap of GINI at some point between 1999 and 2015

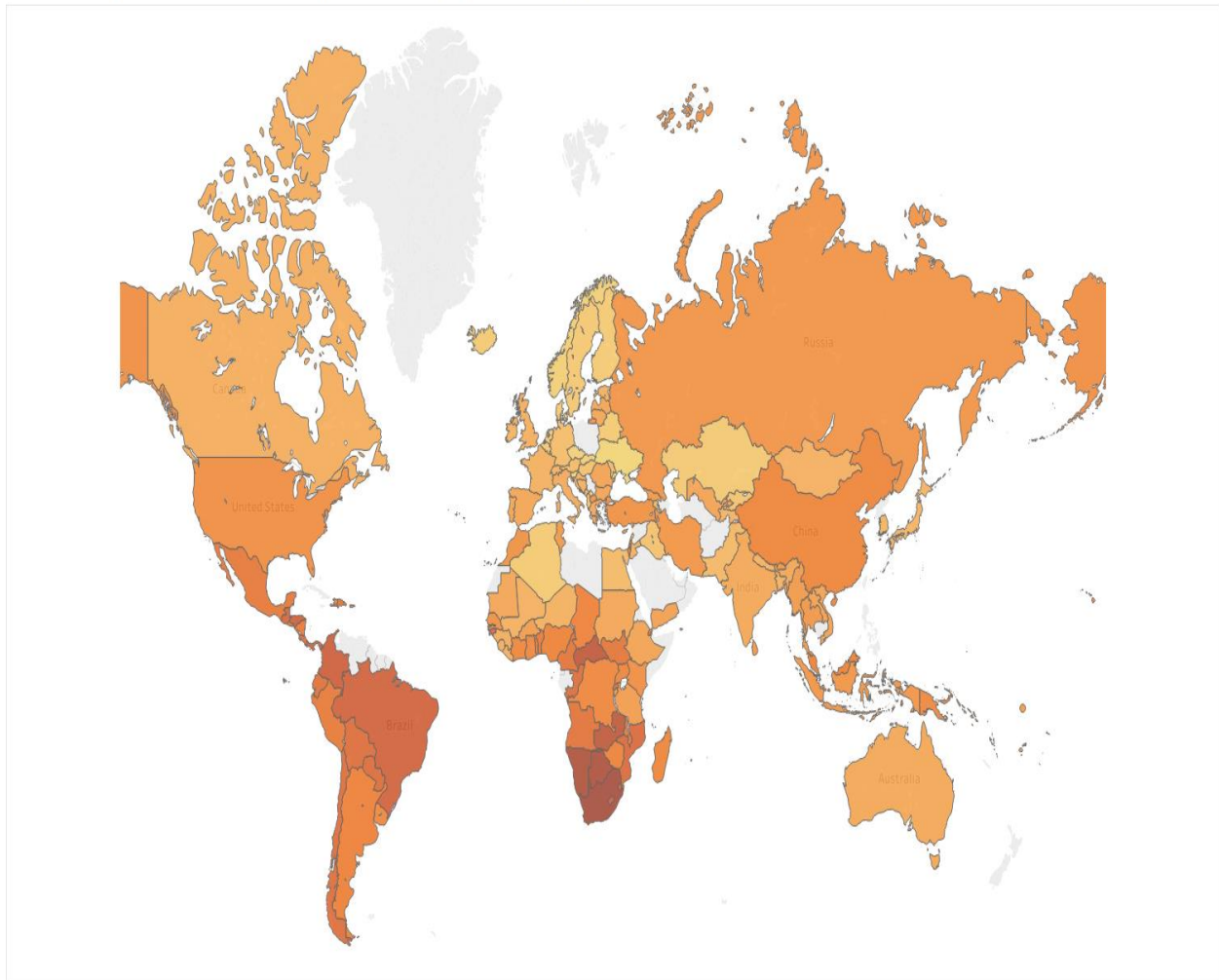


Figure 2: The above heatmap highlights uses a color gradient to show the relative level of income inequality for each country. The darker the country, the greater the relative level of income inequality. The average GINI value between 1999 and 2015 is used here because some countries have multiple GINI indexes within that range whilst others have a single value, so a single year could not be used. The darker the country, the greater the level of income inequality. Grey countries have no GINI value within the specified year range. A trend can be seen here where Latin American and African countries seem to have the greatest levels of income inequality relative to other continents. Sourceⁱⁱⁱ

It appears the Latin American and African countries both have the greatest levels of economic inequality and the highest levels of homicide, giving evidence to what past research has shown. However, a visual representation of the correlation of the two variables is worth demonstrating.

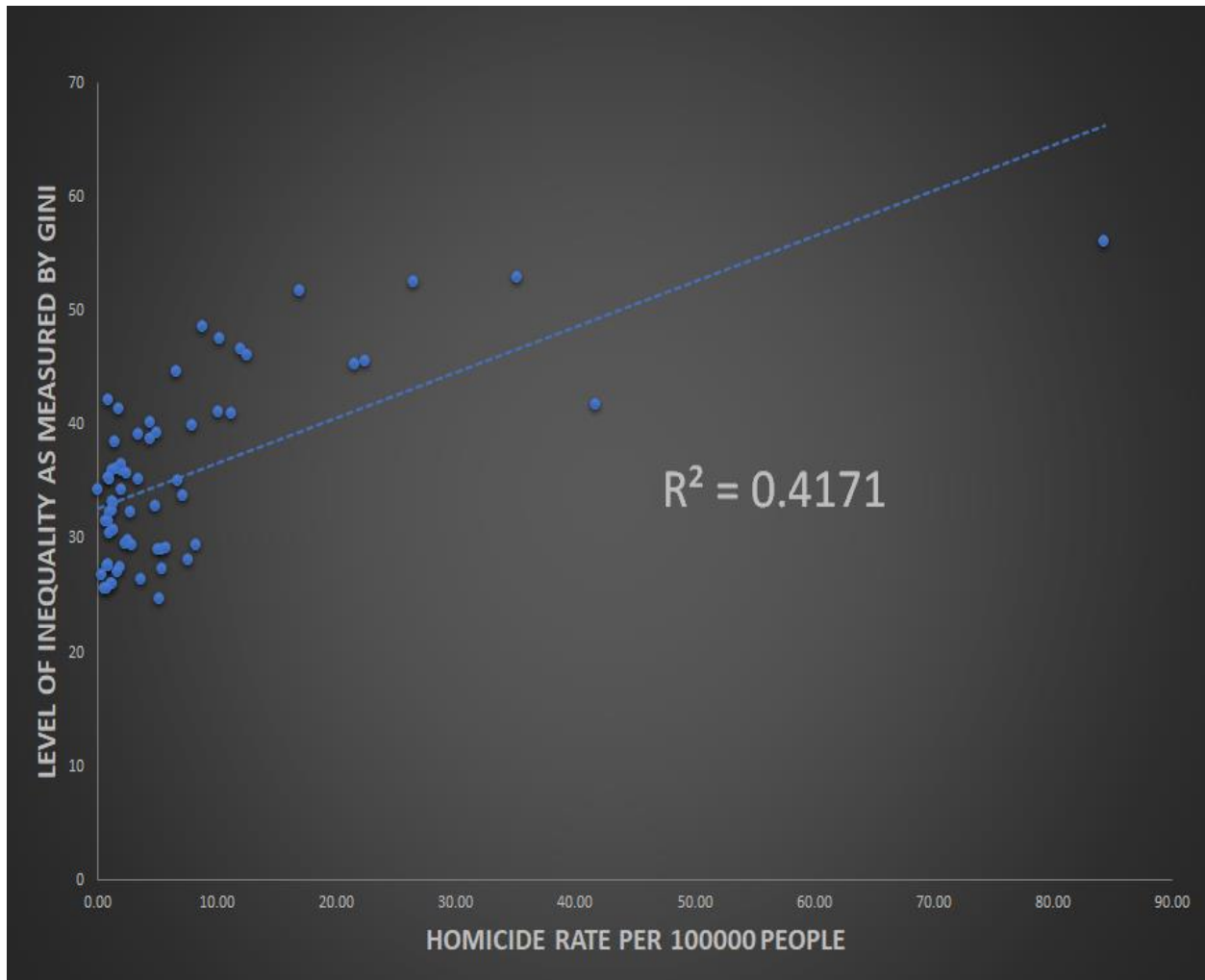


Figure 3: Data is from 2012. The scatterplot has a statistically significant trendline, the p-value being less than .001 using a t-test, with a correlation coefficient of .4171. The correlation coefficient, for a given model, describes the amount of variance that can be explained by another variable. Thus, in this linear model, the homicide rate is approximately 40% explained by the level of income inequality, certainly a valuable insight. Source^{iv}

Since income inequality is clearly an important driver of homicide, we should drive down income inequality in order to reduce homicide rates. Many political and economic theories have been developed to accomplish this, with communism perhaps being the most well known example. However, in considering the scope of this evaluation, it is critical to limit the solution to something perhaps a little more implementable given the current status quo. A study conducted by the IMF says that two of the biggest drivers of income inequality is education inequality and technological change^v. However, since the portion of technological change that is most significant is the skill premium for highly skilled individuals, perhaps education in a general and vocational sense can provide a multifaceted solution.

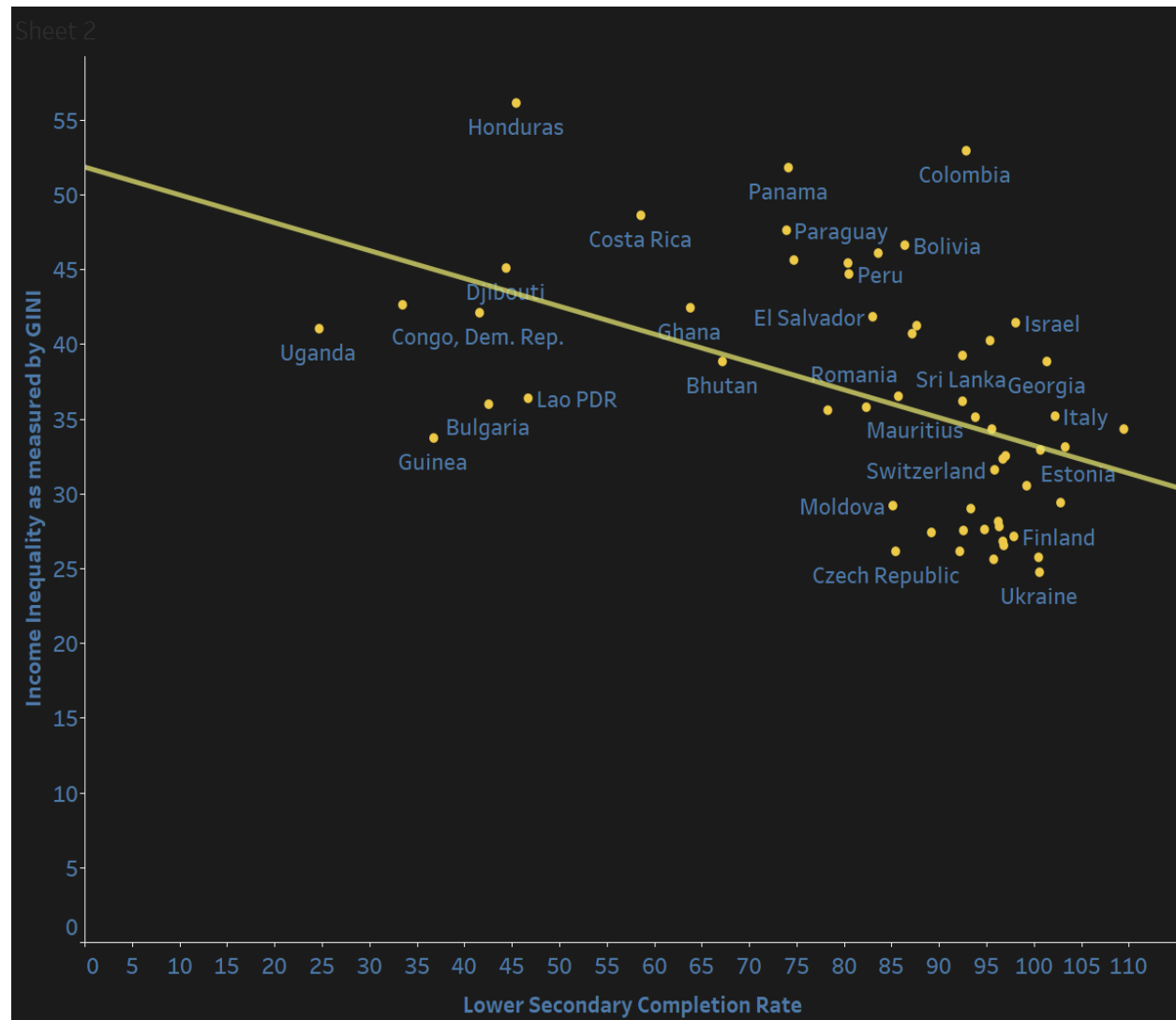


Figure 4: Data is from 2012. The scatterplot has a statistically significant trendline, the p-value being less than .001 using a t-test, with a correlation coefficient of .2360. Clearly, the greater the level of education attained by the populace, the lower the level of inequality usually is. While education is not a catch all solution, it is clearly a ticket of importance towards the economic prosperity of greatest number of people. Source^{vi}

Education, on its own, will not solve the issue of income inequality. But this evaluation is an attempt to address one facet of a factor that is significant for the overall problem of homicide. With that in mind, a recommendation is provided for policy implementation to most world governments, particularly those with the greatest levels of income inequality. The recommendation is to try to maximize the level of lower secondary education completion rates.

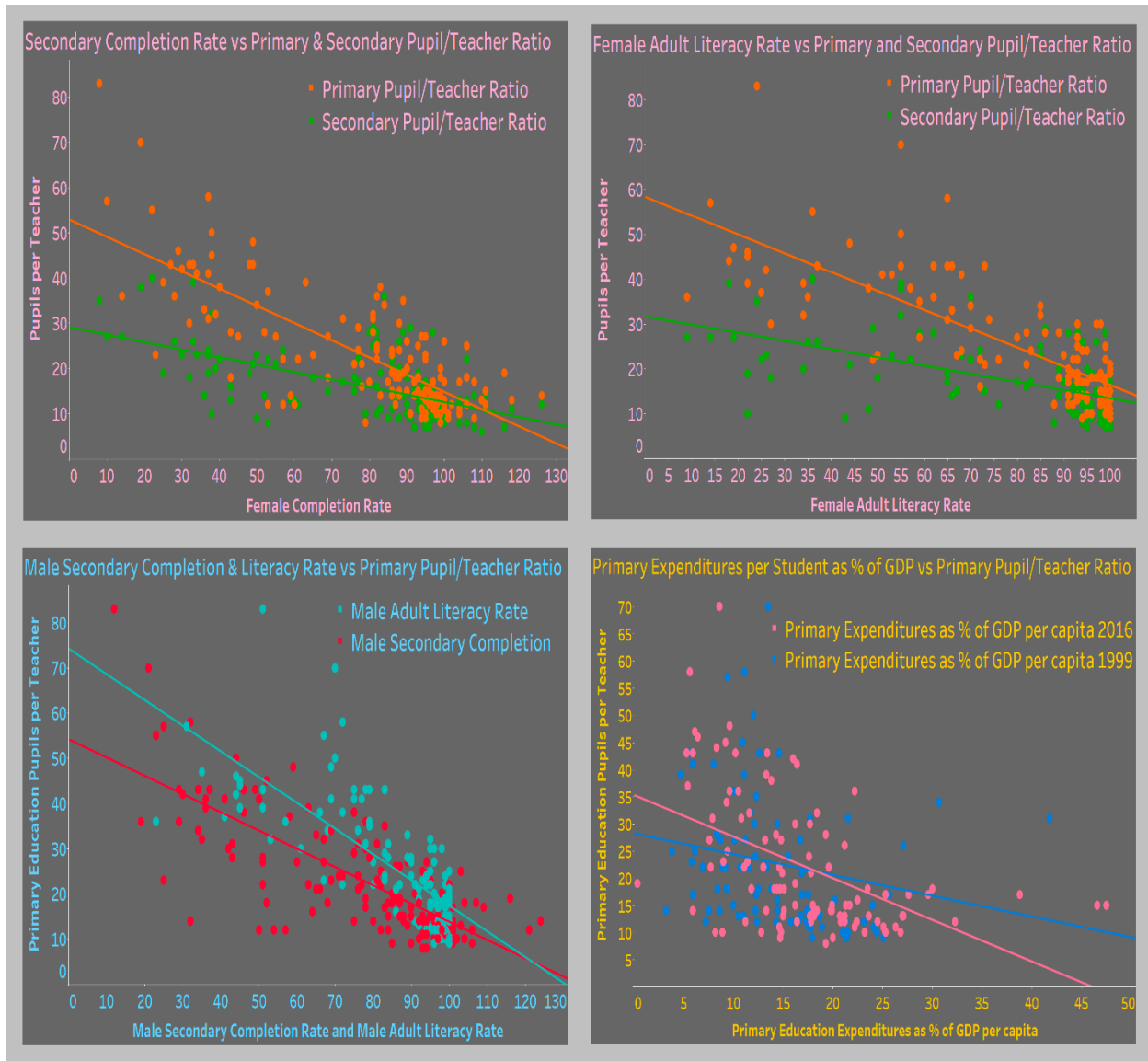


Figure 5: Data is from 2016. Each scatterplot here is statistically significant. The overall picture described by the series of plots is that the number of teachers per student in primary school is the biggest indicator of secondary completion rates. Furthermore, an increase in money spent as a percentage of GDP per capital causes an increase in the number of teachers per student, although governments have become more efficient with spending since 1999. Source^{vii}

One way to help increase educational success is by increasing spending on education, but particularly on primary school as that seems to hold more significance than later education. The hope of this evaluation is that governments can use these insights in order to implement specific policy changes that might decrease the amount of violence in our increasingly globalized society. There is no easy fix for such a complex problem, but a clear understanding and a strong conviction to act on what needs to be done can go a long way for legislators.

BIBLIOGRAPHY

- ⁱ (n.d.). Retrieved December 22, 2018, from <http://databank.worldbank.org/data/reports.aspx?source=2&series=VC.IHR.PSRC.P5>
- ⁱⁱ (n.d.). Retrieved December 22, 2018, from <https://siteresources.worldbank.org/DEC/Resources/Crime%26Inequality.pdf>
- ⁱⁱⁱ (n.d.). Retrieved December 22, 2018, from <http://databank.worldbank.org/data/reports.aspx?source=2&series=SI.POV.GINI&country>
- ^{iv} (n.d.). Retrieved December 22, 2018, from <http://databank.worldbank.org/data/reports.aspx?source=2&series=SI.POV.GINI&country>
- ^v (n.d.). Retrieved December 22, 2018, from <https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf>
- ^{vi} (n.d.). Retrieved December 22, 2018, from <https://data.worldbank.org/indicator/SE.SEC.CMPT.LO.ZS?view=chart>
- ^{vii} (n.d.). Retrieved December 22, 2018, from <https://data.worldbank.org/indicator/SE.SEC.CMPT.LO.ZS?view=chart>