Global Growth of Gender Equality Laws (2009-2017)

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Initial Version

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Final Version

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Summary

The Tableau Story involved in this write-up depicts the global levels and growth of gender equality laws between 2009 through 2017. It attempts this by first showing a global map where the prevalance of these laws are, then breaking down the laws into three separate categories: Domestic, Employment, and Maternity. Finally, we can see a correlation between these laws and the proportion of parliament seats occupied by women.

Important Note: Not all countries were surveyed or measured in the dataset source, so the domain was restricted to the following which returned 42 total countries: - Top 30 Total Gross Domestic Product in US Dollars - Top 30 Total Population

Design

The entire objective of the visualization revolves around gender equality, so I felt it was critically important to break away from the traditional pink-and-blue colors depicting females versus males and guide the user through a more gender neutral lens. I researched several articles online to gain some knowledge on any possible standard or acceptance of gender neutral color palettes used in today's media and industries. In the article titled An alternative to pink & blue: Colors for gender data, a news media company based in the UK utilized a green color and a purple color in their visuals to depict the male versus female data points. I chose to follow their example for my story, however initially those exact two colors turned out too pale and not vivid enough for the scatterplot, so I experimented with the saturation levels of each color until the two balanced well throughout the entire story.

I aimed to keep the visualization simple and de-cluttered. In my professional career, I have come across many charts and graphs that were too "busy" with shapes, text, and colors; all too often, the main purpose of the visualizations get lost within the clutter, making it more difficult for the user to fully grasp the data story. In my initial visual explorations, I'd depicted all 42 countries in individual bars both horizontally and vertically experimenting with different measures, however in each situation, the chart would need to be shrunk down to fit the screen making the text too difficult to read or the user would be required to scroll through the chart. Having that scroll capability, the disparaties between the upper bounds and the lower bounds of the measurements become lost to the user - a very critical purpose to the data story itself. For this consideration, I decided to use an aggregation across all countries to show the disparaties between the categories of gender equality laws in the second chart. For the first and third charts (the map and scatterplot, respectively), the main purposes were better visualized without the use of aggregations, keeping the measures separated individually by country.

The third chart (scatterplot) initially showed filled-in circles for each data point without any horizontal and vertical aggregation lines. The circles, whether filled-in or empty, seemed a bit too clunky and simplistic,

however changing these data points to filled-in diamond shapes gave the chart more character and allowed each point to be more separate or sparse from each other. The horizontal and vertical aggregation lines split the chart into quadrants; this draws the user into seeing more clearly the correlation between the total number of gender equality laws and the extent of female representation in parliament for each country.

The two main changes that I incorporated into the visualization from the reviewer feedback were the story title and the data points depicted in the second chart (bar graph). My story title initially stated "Global Gender Equality Laws between 2009 and 2017", however as one reviewer pointed out, this seemed ambiguous and did not give the story a clear purpose. In my previous draft, the second chart showed the average percentages of countries; for example, the Maternity category had a total of 2 laws possible that could exist in each country with an actual average of 1.442 (72.09%). The Employment laws, however, had a total of 5 laws possible with an actual average of 2.953 (59.07%). Since the Maternity category had a higher percent than the Employment category, both reviewers concluded that globally Maternity laws had a higher importance than Employment laws. My chart gave an opposite and skewed perspective of the story being told. I unwound the data points from the percentages and stuck to the total averages instead - the chart now gives a more accurate depiction of the global importance of each category.

Feedback

What do you notice in the visualization?

Reviewer 1: The title caught my eye. It stimulated my thinking. However, it seems a little ambiguous. Can you think of a title that implies or suggests the message about the visualization that you are aiming to communicate?

I was impressed by the sliding ruler that allowed me to select the date. Had you ever thought of organizing the visualization to allow the juxtaposition of data for two different dates?

Your thoughtfully selected visualizations to clearly depict the data. Well done!

Reviewer 2: As time progresses there are more laws and the laws are more strict.

What questions do you have about the data?

Reviewer 1: While there are globally more maternity laws than domestic laws than employment laws, do the differences seem large enough to be significant? What factors might account for the differences?

Reviewer 2: None

What relationships do you notice?

Reviewer 1: I noticed essentially the relationships that you pointed out in your analysis. Namely, the more women in the national parliament, the greater the number of gender-equality laws; and the difference in number of laws appears to differ by region in a way that suggests that culture differences may be operating.

Reviewer 2: The materinity laws seems to have a higher importance than the rest of the laws and as the years progress the weight of the laws also progress

What do you think is the main takeaway from this visualization?

Reviewer 1: As women's participation in government increases, laws promoting increase. However, because there is also a cultural factor, I am wondering if there might be joint effects not inferable from the visualization.

Reviewer 2: That as time goes on the law trends seem to go up also depending on the gender of those in charge the importance of the laws seem to follow.

Is there something you don't understand in the graphic?

Reviewer 1: I am surprised that some countries in Africa other than South Africa have a large number of gender equality laws. I would want to know what factors differentiate these exceptional countries from their neighbors.

Reviewer 2: no, I feel that the graphic was created in a very well format and depicts the information well

Resources

Rost, L. C. (2019, February 14). An alternative to pink & blue: Colors for gender data. Retrieved from https://blog.datawrapper.de/gendercolor/.