IT UNIVERSITY OF COPENHAGEN

DATA VISUALISATION AND DATA-DRIVEN DECISION MAKING (SPRING 2023)

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Global Progress Toward Gender Equality

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1 INTRODUCTION

Gender inequality occurs when people are not treated equally due to their gender. It is prevalent in many areas, but primarily in the ones of health, education, and the job market.

Even though gender disparity continues to be a problem, much progress has been made over time. For this reason, we decided to look into the gender disparity index for each country from 1990 to 2021. This indicator comes from Human Development Reports, specifically the Gender Inequality Index (GII), which can be found at https://hdr.undp.org/data-center/thematic-composite-indices/. It reflects gender-based disadvantage in three dimensions—reproductive health, empowerment and the labour market. It goes from 0, which represents equality, to 1, where one gender is significantly disadvantaged in all of the aforementioned areas. This metric is based on:

- Health: The maternal mortality ratio and adolescent fertility rate.

- Empowerment: The percentage of parliamentary seats held by each gender as well as levels of secondary and higher education completion.

- Labour market: Women's participation in the labor force.

2 WHY WE VISUALIZE?

Our main goal for this visualization is to inspire society and promote a sense of shared accountability for addressing gender inequality. We hope to raise attention to the regions that require targeted efforts and solutions by highlighting the countries that are still struggling with this problem.

Additionally, by analyzing this data, we may compare and evaluate the progress made by continents. This comparative analysis provides important information that could help identify those regions that need more focus and funding.

Our visualization acts as a catalyst for action by motivating people and groups to take on projects that advance gender equality.

3 DESIGN THINKING

When you access the link provided, you will find an interactive visualization showing the development of the gender inequality index through time. When you hit play, you will see how the map's colors evolve over time. In order to make it easier to summarize and understand, we have also created a secondary graph that shows the progress made by each continent. You will see arrows indicating each continent and its related trails in the graphic. You may view and contrast the relative levels of progress accomplished by each continent over time.

We chose the colors purple and yellow for certain reasons. International Women's Day is linked to the color purple, which stands for equality and emphasizes the historical importance of promoting gender equality. The color selection honors the ongoing efforts and significant victories in the fight for gender equality.

We wanted the second color to contrast with the first and make a strong statement. Yellow was thus picked because it stands for the exact opposite of purple. This deliberate contrast highlights the need for change and calls attention to the inequality that still exists. The color scheme of purple and yellow acts as a symbol of the ongoing fight for equality as well as the significance of educating people and taking action.

During the data analysis process, we found that the dataset was incomplete. Thus, we purposefully chose not to give any color to the countries with missing data in order to draw attention to this problem in our display. To highlight this issue in our visualization, we made the decision not to assign any color to the countries with missing data. However, it is important to note that as soon as these countries have available GII values, they are included in the calculation and considered in the overall analysis. This strategy guarantees transparency regarding the dataset's completeness and prevents inaccurate interpretations.

4 LINK TO INTERACTIVE VISUALIZATION

https://public.tableau.com/views/GenderInequalityIndex_16843307710740/Dashboard?:language=en-US&:display_count=n&:origin=viz_share_link