Gender Equality and Political Representation:

A Global Analysis

By

Haja Mohamed Nafe

Faculty Advisor:

Dr. Andrew H. Ziegler, Jr.

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Contents

Abstract

This is a quantitative and comparative study that looks at the factors influencing gender equality in political roles. The data are taken from Microcase (2013) and the Global file. The researcher uses gender equality index to measure gender equality in general in nations, and the percentage of female ministers as a more precise measure.

Although this study concludes that economic factors have the most influence on gender equality levels, there are other social and political factors such as education, region, political stability, and the press that also have a significant impact on it. For the percentage of female ministers, it is the political factors that influence it the most. The press also has a strong effect on the female political representation. All the other factors are either moderate or weak when it comes to their influence. Based on the findings and analysis prove that female political representation is not an indicator of gender equality.

This study will help policymakers to identify the problems that are preventing the achievement of gender equality and tackle them. Since it is a comparative study, state actors can consider following the steps of other nations that have better levels of these life qualities.

I. Introduction

Over the last few decades, topics related to gender have been highly discussed and investigated. The complexity of the term itself has been challenging to some extent to scholars and researchers. Before conducting any study, a clear definition of the term "gender" must be addressed. Many people confuse the term gender with sex; while sex is the biological nature of the person (female or male), gender is the identity that one gives to his/herself. It is the role that one chooses to play in society and mostly categorized as man or woman. When presenting issues related to gender, it is always necessary to provide a simple and comprehensive definition of the term to avoid misunderstanding.

Besides the difficulty in conceptualizing the term, related matters are hard to investigate. There have been many problems that are politically important to study. One of the most significant issues to study is the difference in gender participation in politics. Since the beginning of time, politics was considered as a "manly matter." Women were excluded from political performances such as leading, legislating, and governing. However, during the recent years, the role of women in society has been questioned and challenged. Women nowadays are more aware of their rights and have been exposed to what is called "gender equality." As a result, they started shifting their roles and competing with men in fields that they never belonged to before. Now one can observe women working side by side with men in offices, institutions, and other public places. What was one day considered to be the norm is now seen as old ideas and traditions. Women are no longer just mothers, wives, daughters, and sisters, but they are work colleagues, governors, and leaders.

Political participation is one of the greatest topics to consider when investigating gender equality. There are many problems that societies are facing today because of the uneven

distribution of genders in politics. Major matters that fall under this topic can be the change of roles in society. There are many critics to the fact that most women nowadays prefer breaking the stereotype that they should be only wives and mothers. They compete with men in getting the same job opportunities.

Also, the lack of women politicians is another problem that is considered to be an obstacle to achieve gender equality. The tradition of having only men in the field of politics is fought against by women who have learned about their rights and freedoms. The limited number of female presidents, ministers, and legislators proves that men are still in control of politics. Women will have to strive to obtain the equal participation of genders in politics.

Finally, the issue of women empowerment is also another issue that has arisen from the gap between men and women in political involvement. This separation is encouraging more women to empower each other and support their movement to make a change. When it comes to this particular matter of political participation, women usually feel that they are being discriminated against. This situation pushes them to identify the obstacles that are causing this gap and then eliminate them.

These issues can result in serious consequences on societies and states that might be problematic to deal with. Gender inequalities, social constructions, and the conflict in women and men's rights are considered to be some of the most recognizable consequences of the topic mentioned above. This issue has been a hot topic in world politics these days; there are movements that are politically oriented which were created to raise awareness about gender rights such as feminism. This indicates the necessity of having deep studies and investigations in order to look at the problems causing the conflict in roles of different genders. More importantly, there should be some understanding of the topic to find proper solutions to these problems.

The purpose of this research is to answer the following research question: "What kinds of nations have greater gender equality in political roles?" This research will be conducted and presented in a very structural way. It will contribute to inform the public and legislators on the topic so they can make decisions accordingly. Serious problems and issues will be addressed so actors can be able to understand them and therefore suggest solutions. The study of the terms and analysis of the data will provide a clearer picture of topics that are related to political participation. It is a comparative study which will result in significant information not only of one country but of various different countries and regions. This means that the results and findings can be used by many actors around the world.

To answer the research question of this study, the data will be taken from the Global file from Microcase (2013) which strengthens the reliability of this quantitative research. In order to present this work, the paper will be structured in five different sections. The introduction will give a brief background to the investigated issue. It will be a general description to the main topic. The literature review is the second part of the research. It gives different opinions and arguments that have been discussed by several authors. There will also be some arguments taken from scholarly articles and journals. The methodology is where there will be a detailed description of the process in which this research will be done. The findings and analysis, however, is the part in which the researcher will present the real data collected from the global file. It will be a statistical answer to the research question supported by analysis. Finally, is the conclusion which provides the main points and arguments of the study. It will wrap up all the analysis.

II.   Literature Review

The gender gap in political representation is not something new to be studied. Gender disparities in different fields have always been a characteristic of human societies. Equal jobs and positions opportunities between men and women offers the development that all countries are seeking. According to the United Nations, "achieving the goal of equal participation of women and women and men in decision-making will provide a balance that more accurately reflects the composition of society and is needed in order to strengthen democracy and promote its proper functioning" (Squires 2007, 22). Even with such highlights, there is no doubt that women in many countries are underrepresented in politics. Men still hold the greatest portion of political participation. The reasons might differ from one country or region to another. Nelson and Chowdhury (1994) conclude that there is no country that has the same equal access to and influence in politics between men and women; men always rank the top during such comparison. This type of conclusions and findings raise multiple questions. What accounts for this equality? What makes these two genders different from each other? Over the last few decades scholars and researchers have been interested in examining the issue and finding the main factors causing it. The purpose of this section is to give an insight into the issue from the perspective and findings of various reliable authors. To simplify this process, arguments will be divided into two schools of thought: Internal and external factors affecting gender gap in political participation in addition to a conclusion.

Internal factors

Many scholars argue that the underrepresentation of women compared to men in politics is because of internal factors. Hayes and Lawless (2016) argue that women suffer from self-

doubt when it comes to taking part in politics. This eventually decreases the chances of women running for office positions which will contribute more to the gender gap in the field. After conducting her study on the issue, Burrell (1994) supports the previous view by confirming that this phenomenon is not resulted from the lack of parties and voters' support. Rather it is a personal reason that women in general do not run as much as men. Another internal factor to this problem that has been highlighted is that women are not conscious about the social discrimination that they are facing. The lack of developing such quality put women behind and open more doors for men. This claim is proven by the fact that after having a feminist movement which increased a feminist consciousness, the number of women running for political positions increased (Han and Heldman 2018). Both Han and Heldman (2018) add that the way both genders have been taught politics makes both of them interested in the field differently. Boys back in history were highly encouraged to be well informed about politics and interested in it. This is illustrated in the findings of the study that was held to see what gender is more interested in politics. The results show that 26 % of men are "very interested" in current political events, while only 15 % of women did (Han and Heldman 2018).

Not only that the level of interest in politics is lower for women, but Haack (2014) claims that women in politics have different preferences than men which might shape women's choice of political positions. Women tend to be interested more in compassionate matters such as health care, civil rights, child care and education while men prefer dealing with issues linked to trade, agriculture, taxes, and military. The interest in different political issues is explained by Coffé (2013) that is rooted in the levels of confidence that the gender has in his or herself. Because men are more confident about themselves, they usually prefer dealing with matters on the

national and international levels. In contrast, women lean more towards local issues because of their low self-esteem and confidence in their abilities to handle problems on higher levels.

Moreover, the National Public Radio (2016) published an article dealing with the matter and it suggests that women who have the potential to be candidates tend to be less competitive, and are not confident about themselves which makes them think that they are not highly qualified to be an officer. This therefore enriches the gender gap in political participation (Kurtzleben, 2016).

<u>External factors</u>

The previous school of thought highlights possible internal reasons that are contributing to the existence of this gender gap. It offers an understanding on how women can create the obstacle themselves and hinder their progress to establish gender equality in politics. This school of thought, however, focuses on the external factors that are causing this issue. After studying the case of women's political participation in many different countries, Nelson and Chowdhury (1994) conclude that the changes that occur in a country's political institutions especially parties and their interests are the major reason of putting women behind. An example of how a region's political programs cause this gender gap is illustrated by Arceneaux (2001) in his article. He confirms that political scientists have found that multimember districts are more likely to have more women in the legislative office than in single member district.

According to feminist scholars, the main factor that increases political gender inequalities is categorical discrimination. Men and women are appointed and selected for political positions differently. Leaders prefer giving men high and powerful jobs while appointing women for lower positions (Su 2006). Also, the absence of quotas adoption which means that more political

positions are being given to women can limit the female participation in politics. The introduction of quotas did not help in appointing more women, but increased the number of women selected as leaders. This supports the idea that the lack of efforts from countries' leaders to establish gender quotas in their system always leaves women behind men (O'Brien and Rickne 2016). There are also traditional and religious causes. Inglehart and Norris (2003) found that countries which have strong traditional values that emphasizes the roles of men and women in the society, tend to show higher levels of gender disparities in political engagement. In such societies, women are more likely to run less than men, and if they do so, they do not receive as much vote as their male partners just because of the public's cultural view on women. In their study on women's representation in politics in South Eastern Europe, Rashkova and Zankina (2017) find that the fact that the Ottoman Empire had a very strong influence in the region, cultural values favoring patriarchal principles has been a characteristic of the region. Although these principles and other social values have been questioned, most of social, political, and economic issues are dealt with through these principles.

The society is definitely responsible for this disparity. Because of the responsibilities that women have towards their families and households, they tend to run later in life than men (Arceneaux 2001). Rao (2005) in her studies finds that most women councilors are old in age because of the time that the family duty takes from them. They tend to participate in politics more when they overcome childcare. The way people view things is very tied to the way their societies' principles have been constructed. Gender stereotypes is for example one of the major obstacles to women gaining equal political participation to men. Because from a very young age some societies teach boys and girls their social roles, the public might hold a certain picture of

each gender's responsibilities and act accordingly pushing more men into politics and women into the house work (Brooks 2013).

Besides these stereotypes generated from the society, there are other reasons that can force the separation of roles in genders. For example, the war and ethnic conflicts in Southeastern Europe force men to go and fight while women had to stay in the house and take care of the family and property (Rashkova and Zankina 2017). Su (2006) argues that by choosing China as a case study, there is a great correlation between region where women live and their political under representation. Regions that are more modernized and have better education systems encourage more women to be more engaged in politics.

Conclusion

As it is illustrated above, many authors and scholars have differed in their points and arguments about the issue. It is a very controversial topic because of the variety of reasons that might be presented to examine it. Although this section provides two schools of thought that have differ in their arguments on the main factors causing gender inequality in political representation, both schools of thoughts, however, agree on one thing; men still hold the highest level of political representation in every county. This section tries to provide different views on the issue so the reader can have a general understanding of the matter. After discovering different reasons suggested by different credible authors that contribute to gender inequality in political participation, the following section will present the methodology which will examine the issue and give concrete answers to possible reasons. Data will be provided to support or reject the chosen hypothesis which will contribute to answering the research question of this study.

III.   Methodology

This section will be used to provide an understanding of the ways and methods in which the research question will be measured. The literature review discusses possible reasons affecting gender equality in political roles by relying on two schools of thoughts; internal factors and external factors. However, only external factors will be tested in this paper since internal factors such as female consciousness are hard to be measured. They will be separated into three parts: social factors, political factors, and economic factors. This technique will help in understanding how different aspects of society can influence gender equality in political role. In order to reach answers of this study's research question, the GLOBAL file from MicroCase (2013) will be used to measure the selected variables. These variables that are represented as concepts will be operationalized in further sections.

A. Concepts and Variables

This research is using two main dependent variables. The variable 371) GENDER EQ is a ratio level variable that looks at gender equality in different countries. It is a gender-related development index (GDI) that measures gender equality in general. It ranges from 0.28 to 0.95. The higher the value is the better gender equality. This is the best variable that can be used to test the research question since this study is dealing with gender equality. It might be the best and most accurate variable to be used when conducting this study. However, to be more precise another dependent variable has been added. Variable 373) %FEM.HEADS is a ratio level variable which looks at the percentage of government positions at the ministerial level held by women. It ranges from 0 to 55. The first variable tests the broad concept of gender equality in general. The second variable, however, will help in being more precise while measuring gender

equality in political roles. The percentage of political positions held by women will be a good indicator of the level of gender equality in the country.

In contemporary politics, gender equality is one of the most concerning matters to governors and policymakers. Low levels of gender equality are a sign to different things. It can mean the lack of democratic practices, civil liberties, and freedom. Many countries are working on getting to the stage of political, economic, and social development, which cannot be achieved if there is gender inequality in the country. There are many obstacles that might stand in the way of these countries to achieve this equality. This study will offer some of these obstacles that policymakers can work on to make a change.

Political Variables:

1. 271) GLOBAL:POL is a ratio variable which looks at the political engagement that measures globalization in terms of a country's membership in international organizations, military and financial contributions to the UN peacekeeping missions, ratification of treaties, and governmental transfer payments and receipts. While looking at this variable, 1 = low globalization, and 62 = high globalization.

2. 341) WAR is a nominal variable, which provides different types of wars that occurred from 1990 to 2002. Countries are located in different categories according to the type of war that they had during this period. In this variable 1 = none, 2 = interstate, 3 = regional and/or general civil war, 4 = war of independence, and 5 = multiple types.

3. 298) POL.STB:04 means the governance quality in terms of political instability violence. It measures the likelihood of violent threats to, or changes in government including terrorism. A higher value means greater stability. This ratio variable ranges from 0 to 100.

4. 331) %TURNOUT is a ratio variable which provides the average voter turnout in percent since 1945 in different nations.
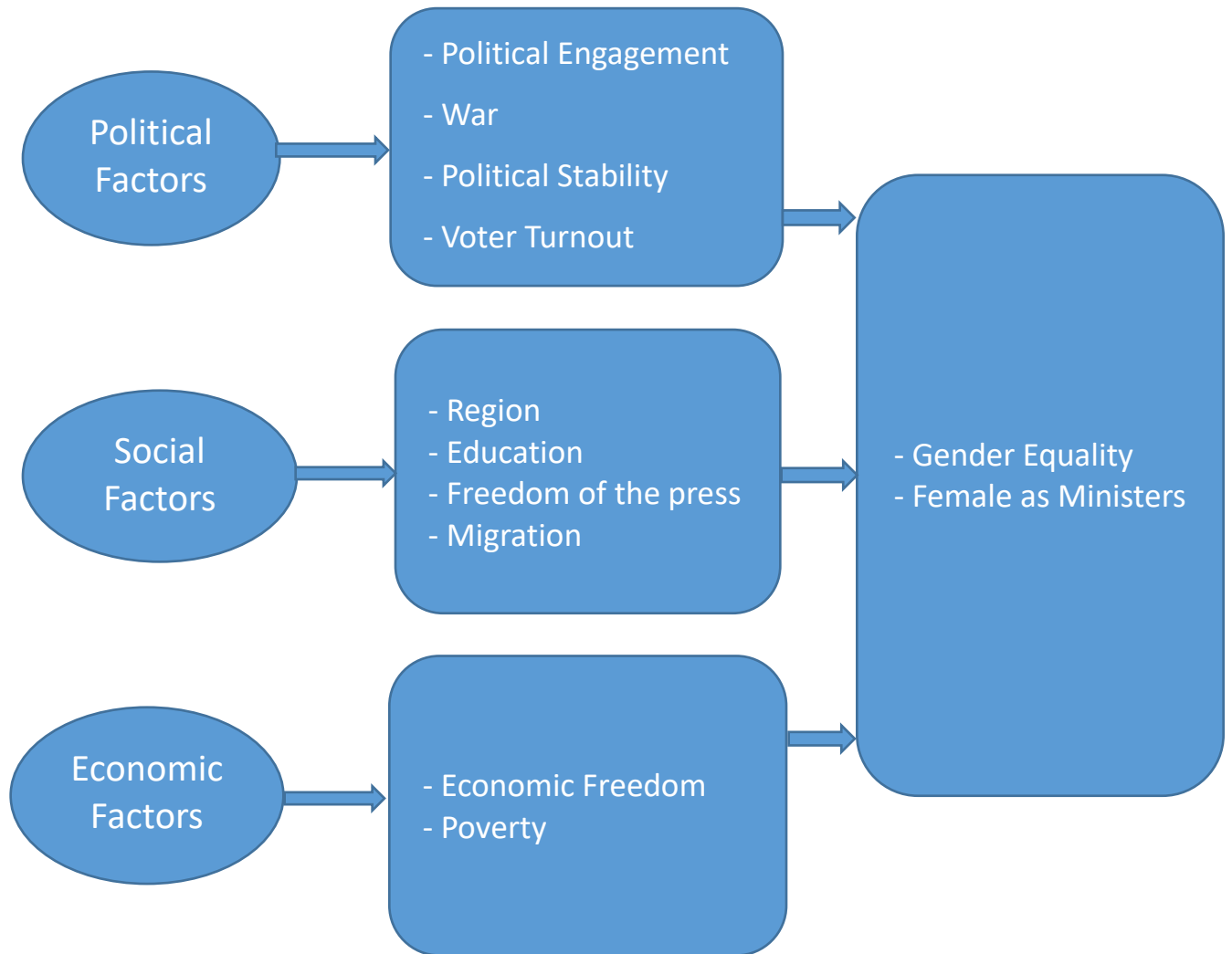
Social Variables:

5. 404) EDUCATION is an interval variable that offers the mean years of school among adults of 25 years and older. It ranges from 0.16 to 0.99. The highest the number is, the greatest education among adults in a country.

6. 346) REGION is a nominal variable that separates countries in five different regions. 1 = Sub Sahara, 2 = Arab, 3 = Asia/Pacific, 4 = Western Hemisphere, and 5 = Europe. This variable can also be used as a substitute to culture.

7. 484) FREE.PRESS is a recoded variable from the original one 308) PRESS.FREE. It is an interval variable which looks at the world press freedom rating. The ranks have been changed to "from high to low" and the decimal digits have been deleted. In this variable 1-30 = not free, 31-60 = partly free, and 61-100 = free. It ranges from 9 to 97.

8. 54) NETMIGRT is the net migration as the net average annual number of migrants during the period. This ratio variable ranges from -2,000,000 to 6,200,000.

Economic Variables:

9. 485) FREE.ECO1 is a recoded variable from the original one 273) ECO.FREE. It is an ordinal variable, which looks at the overall economic freedom. Since the ranking of the original variable has been changed from high to low, 1 will mean a strong state control of economy, and 5 means economic freedom.

10. 175) POP<1$DAY is a ratio value that provides the percentage of people in a country that are living on a less than US $1 a day. This variable ranges from 1.0 to 72.8. The

greatest number means the greatest number of people living on a less than a dollar per day.

Illustration 1: Variables summary

Political Factors → - Political Engagement
- War
- Political Stability
- Voter Turnout

Social Factors → - Region
- Education
- Freedom of the press
- Migration

Economic Factors → - Economic Freedom
- Poverty

→ - Gender Equality
- Female as Ministers

B. Hypothesis

H1a. There is a positive relationship between a country's political engagement and its levels of gender equality.

H1b. There is a positive relationship between a country's political engagement and the percentage of female ministers.

A country that is engaged politically in the international community can easily be influenced by foreign policies. By signing multilateral treaties, a country is put in a situation where it is forced to follow the agreements. Therefore, there are higher chances for such countries to sign treaties that protect human rights and gender equality.

H2a. Countries that have not experienced any type of wars from 1990 to 2002 have higher levels of gender equality.

H2b. Countries that have not experienced any type of wars from 1990 to 2002 have greater percentage of female ministers.

Wars are destructive; they can change a whole society's system from ideologies to government. There are wars of ideologies such as civil wars and also a country might change its policies after having a war. However, the absence of war might be a sign of long-term stability and therefore great progress in the country.

H3a. There is a positive relationship between a country's political stability and its level of gender equality.

H3b. There is a positive relationship between the country's political stability and the percentage of female ministers.

A country that is politically stable might reflect the satisfaction of its citizens. This satisfaction comes from the effort of the government to provide the citizens' needs.

H4a. There is a positive relationship between the average voter turnout in a country and its level of gender equality.

H4b. There is a positive relationship between the average voter turnout in a country and the percentage of female ministers.

Voting has always been a good measure to freedom, which includes gender equality. There are many countries where some groups are not allowed to vote such as women. Others have cultural obstacles that limit women from going by themselves to vote.

H5a. There is a positive relationship between the mean years of education among adults and gender equality.

H5b. There is a positive relationship between the mean years of education among adults and the percentage of female ministers.

Education is always a good factor to consider when dealing with social problems. Education shapes the way people think and allow them to question their surroundings. People with less education tend to play an insignificant role in changing societies. It is education that develops people's critical thinking and helps them to establish a sense of what is happening around them. Gender equality and the percentage of women in ministries can be an indicator of a great number of educated people in a certain population.

H6a. Countries that are in the Western hemisphere have higher levels of gender equality.

H6b. Countries that are in the Western hemisphere have higher percentage of female ministers.

Region here reflects the cultural side of these nations. Cultures differ when it comes to gender roles in society. Therefore, it is good to look at what regions/cultures will have higher gender equality or female political representation.

H7a. There is a positive relationship between the freedom of the press in a country and its levels of gender equality.

H7b. There is a positive relationship between the freedom of the press and the percentage of female ministers.

The freedom of the press means the spread of information. In countries with higher freedom of press, citizens are provided with the needed information to be aware about different issues. The press will offer to individuals the knowledge that they need to seek their rights.

H8a. There is a positive relationship between the average annual number of migrants and the levels of gender equality.

H8b. There is a positive relationship between the average annual number of migrants and the percentage of female ministers.

Migration is another way of saying the circulation of ideologies. Countries that are hot spots of immigration are always facing new ideologies and cultures that the newcomers are bringing with them. This fact can increase the influence to national policies.

H9a. There is a positive relationship between the economic freedom level and the level of gender equality.

H9b. There is a positive relationship between the economic freedom level and the percentage of female ministers.

The control of the government to the economic sector might mean that the state is practicing a specific type of government systems. It can also mean that the government will have control over other social and political matters.

H10a. There is a negative relationship between the number of people living on a less that 1% a day in a country and the levels of gender equality.

H10b. There is a negative relationship between the number of people living on a less that 1% a day in a country and the percentage of female ministers.

Poverty is a characteristic of poor social, political, and economic system in any nation. In more modern, progressive, and industrialized societies, governments offer more opportunities for citizens to develop themselves. Poverty is definitely an obstacle to develop or improve oneself therefore a society as a whole.

Research Method

This is an empirical study which uses quantitative data derived from the GLOBAL file on Microcase (1013). The file contains 172 cases which are countries and 483 different variables that deal with a variety of issues. Since the two dependent variables of this study have ratio level of measurement, only ANOVA or Scatterplot will be used as the presentation technique depending on the independent variables. Independent variables with either a nominal or ordinal level of measurement such as in H2 and H6 will use ANOVA. While the rest of the independent variables are either ratio or interval will use Scatterplot.

To measure whether there is a significant relationship between the variables a test of statistical significance will be conducted. This test is symbolized by "prob" which provides a statistical value. If this value equals 0.05 or less than that, it means that the relationship is significant. If the value is above 0.05, it means that there is no relationship between the variables and it is insignificant. To look at the strength of the relationship if there is any, a measure of association will be used. For ANOVA, Eta Squared is the measure. Its values vary as following:

If Eta Squared value is under 0.1, the relationship is very weak to be considered

If Eta Squared value is between 0.10 and 0.19, the relationship is weak

If Eta Squared value is between 0.20 and 0.29, the relationship is moderate

If Eta Squared value is 0.30 or above, the relationship is strong

When using Scatterplot another measure of association will be used which is the

Pearson's Correlation Coefficient that is symbolized by (r). The r levels vary as the following:

If the r value is under 0.25, the relationship is too weak to be useful

If the r value is between 0.25 and 0.34, the relationship is weak

If the r value is between 0.35 and 0.39, the relationship is moderate

If the r value is 0.40 or above, the relationship is strong.

IV.   Findings and Analysis

The purpose of this section is to put the study into more statistical terms. The data presented

by Scatterplot and ANOVA in this section is gathered from MicroCase (2013). There will be

detailed analyses provided to answer the research question. All hypotheses will be tested by

operationalizing the variables mentioned in the previous section. By supporting or rejecting the

hypothesis, clear reasons will be presented to explain the issue investigated. Every hypothesis

will be tested separately, and an explanation will be given to why the variable is chosen, what is

the level of measurement, and what is the measure of association. As mentioned previously,

there will be two dependent variables used in this study. Variable 371) GENDER EQ and

variable 373) %FEM.HEADS are the two dependent variables which will be used with other

independent variables to see the relationship between them. Since there are two dependent

variables, there will be two hypotheses stated for each independent variable and two figures for

illustration.

A. Gender Equality and Percentage of Female Ministers by Political Engagement

The first A hypothesis states that there is a positive relationship between a country's political

engagement and its levels of gender equality. The first B hypothesis states that there is a positive

relationship between a country's political engagement and the percentage of female ministers.

Figure 1a presents the scatter plot of the relationship between Gender equality and political

engagement. Figure 1b illustrates the relationship between percentage of female ministers and

political engagement. In both figures, the dependent variables are placed on the y-axis, while the

independent variable is on the x-axis. Also, every dot represents a country.

Line Equation	Y = 0.661 + 0.004 X		
r = 0.497**	Prob. = 0.000	N = 61	Missing = 111
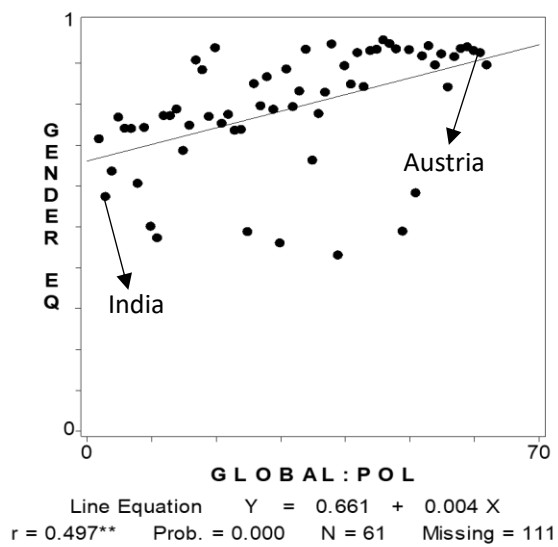
Figure 1a
Gender Equality Global Political
Engagement

Line Equation	Y = 5.798 + 0.409 X		
r = 0.507**	Prob. = 0.000	N = 53	Missing = 119
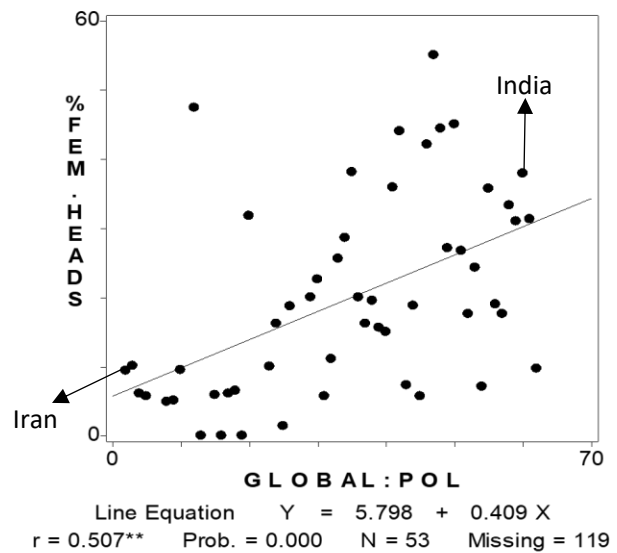
Figure 1b
Percentage of Female Ministers
Global Political Engagement

The regression line shows a positive relationship. The cut off value for the prob is 0.05. Here,

the p value equals 0.000, which means that there is a 0% chance that this relationship is random.

In both figures, the Pearson's Correlation Coefficient (r) value is 0.4 and above which means that

there is a strong relationship between the variables. Depending on these results, the two hypotheses are supported.

There are many reasons that can explain this strong relationship. The main one is that countries which are politically engaged in the international community tend to get influenced by other nation's policies and ideologies. Being internationally involved means participating in agreements and signing treaties that deal with human rights and other matters. Such agreements can push member states to establish human rights principles and encourage female leadership. Once a country creates relations with other nations across the globe, the country will be prone to external influences. These influences are sometimes negative and others positive. However, from the results above, this political engagement is positive for countries that are willing to develop their gender equality levels and female political participation. Austria and France for example, are strongly engaged politically in the international community and have high gender equality and percentage of female ministers. In contrast, India and Iran are the cases where low political engagement reflects low values of the dependent variables.

B. Gender Equality and Percentage of Female Ministers by War

The second A hypothesis to this paper states that countries that have not experienced any type of wars from 1990 to 2002 have higher levels of gender equality. The second B hypothesis is that Countries which have not experienced any type of wars from 1990 to 2002 have greater percentage of female ministers. Figure 2a shows the relationship between the two variables in the first hypothesis and figure 2b shows the relationship between the variables in the second hypothesis. The dependent variables remain the same but the independent variable in this case is 341) WAR. Since this independent variable has a nominal level of measurement, ANOVA will

be used as the presentation technique. Along the y-axis there is the dependent variables, and on the x-axis, there is the independent variable that has five categories: none, interstate, civil war, independence, and multi-type. These categories represent the different types of wars. The dots on the diagram represent countries and they are placed according to the type of war they experienced from 1990 to 2002. Also, the place of countries vertically shows their levels of gender equality and percentage of female ministers.
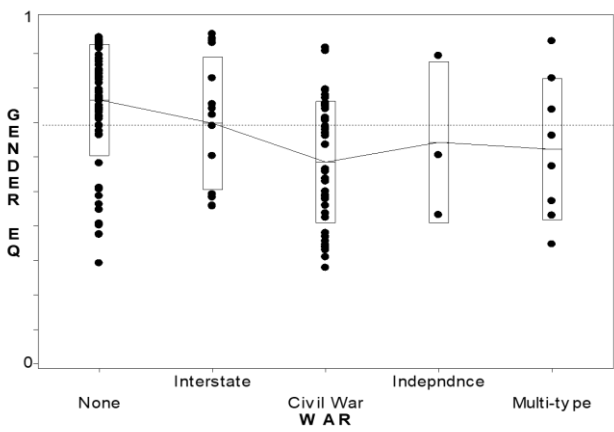
Eta² = 0.185 prob. = 0.000   N= 143 Missing = 29

Figure 2a

Gender Equality by War
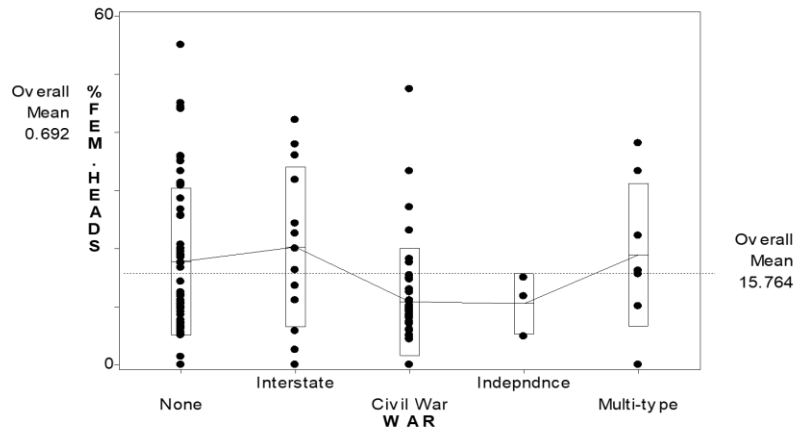
Eta² = 0.091 prob.= 0.020 N= 126 Missing = 46

Figure 2b

Percentage of Female Ministers by War

For the first hypothesis, the p value is 0,000, which suggest that there is a 0% chance for this relationship to be random. The eta squared value is 0.185, which concludes that this relationship is very weak. For the second hypothesis, the p value is 0.020, therefore one can still say that this relationship is statistically significant. However, the eta squared for this relationship equals 0.091, which is a very weak to be useful. Another measure to this relationship can be the average line that crosses all categories. It identifies the average number of states located in each category. In Figure 2a, the line reaches its highest levels for the "none" category indicating that the first

hypothesis is weakly supported. Since in Figure 2b the average line is slightly higher for categories "interstate", and "multi-type", then the hypothesis is not supported.

Wars are destructive and can cause the collapse of societies. This exact reason might be the explanation to why countries that had not experienced wars in the period mentioned above have more gender equality. The aftermath of wars usually forces the affected countries to rebuild the society and construct stronger systems to avoid a similar situation. This means that countries that go through wars tend to consider that as a motive to improve different aspects of the society to be more prepared for any future threat. One of these improvements include individual's empowerment which results in female empowerment. Therefore, countries in the "interstate" and "multi-type" have more percentage of female ministers than the "none" category.

C. Gender Equality and Percentage of Female Ministers by Political Stability

The third A hypothesis states that there is a positive relationship between a country's political stability and its level of gender equality. The third B hypothesis states that there is a positive relationship between the country's political stability and the percentage of female ministers. The two dependent variables are the same, but the independent variable used here is 298) POL.STB:04. Since all variables have a ratio level of measurement, only Scatterplot is used as the presentation technique.

For both hypotheses the p value equals 0.000, which means that the relationship is statistically significant. For hypothesis A, the r value is 0.658 and for the hypothesis B, the r value equals 0.401. These two values suggest that there is a strong positive relationship between the variables. The results, therefore, conclude that the two hypotheses are supported.
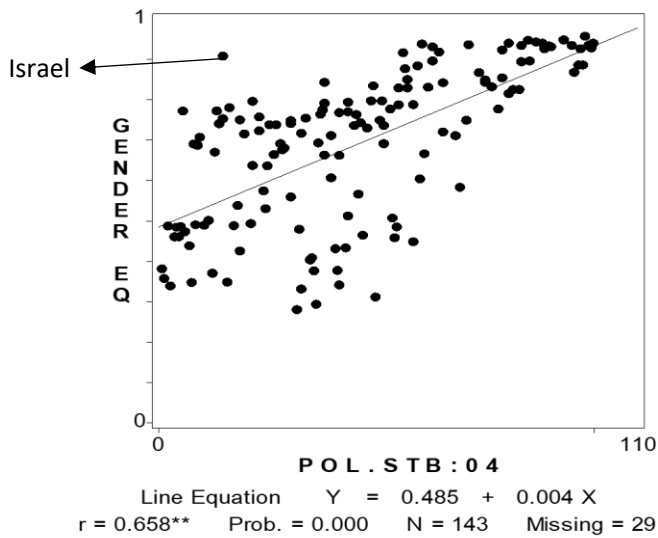
21

Figure 3a
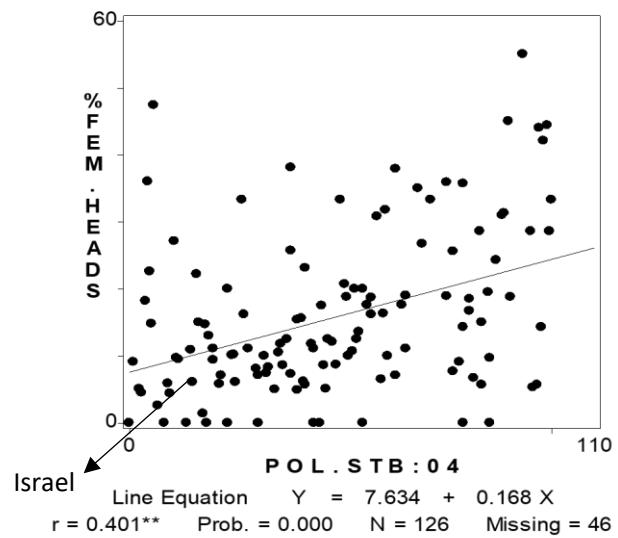
Gender Equality by Political
Stability

Figure 3b

Percentage of Female Ministers by
Political Stability

Political stability is one of the most important factors to consider when looking at gender equality. Countries that are politically stable can afford the facilities and means for the citizens to perform better. There will be fewer disparities between genders since everyone is encouraged to be socially and politically active. From observations of the two figures, one can notice that countries which have higher political stability such as Sweden, and Finland have higher gender equality and higher percentage of females ministers and vice versa. Another observation that needs to be highlighted is the fact that some countries such as Israel have high levels of gender equality but low percentage of female ministers.

D. Gender Equality and Percentage of Female Ministers by Voter Turnout

The fourth A hypothesis states that there is a positive relationship between the average voter turnout in a country and its level of gender equality. The fourth B hypothesis is that there is a positive relationship between the average voter turnout in a country and the percentage of female

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ministers. In both hypotheses, the dependent variables are the same, but the independent variable is 331) %TURNOUT. Since all variables are ratio, the Scatterplot is chosen as the presentation technique.

For the hypothesis A, the p value equals 0.000 and the r value is 0.470 which suggests that there is a strong positive relationship between the two variables. In hypothesis B, the p value is 0.036, which is still statistically significant. However, the r value for this hypothesis equals 0.169 which concludes that this relationship is weak. Based on this data, the first hypothesis is supported while the second is not.
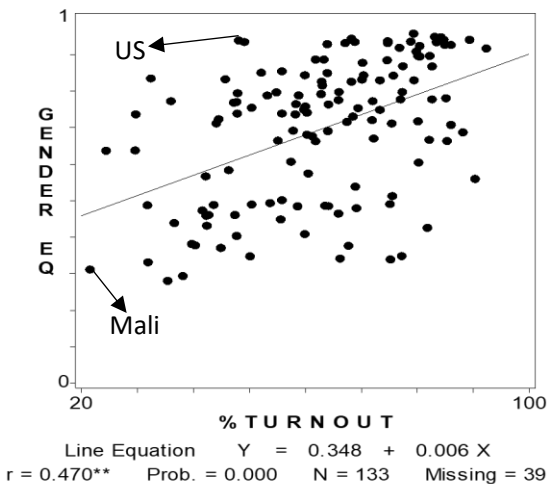
Figure 4a

Gender Equality by Voter Turnout
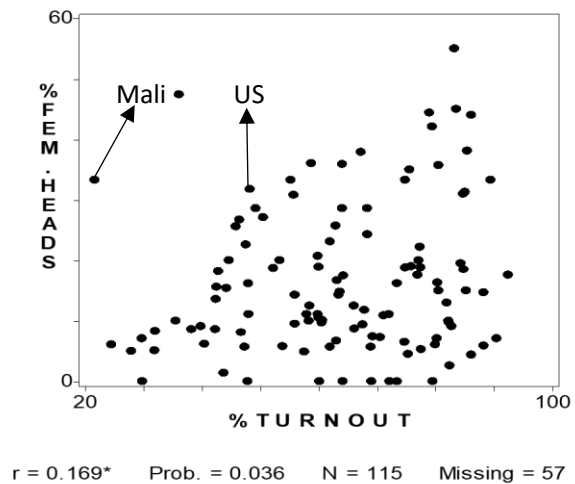
Figure 4b

Percentage of Female Ministers by Voter Turnout

A possible explanation to this contradiction is that female political representation does not define gender equality. Figure 4a shows that every time a country's average voter turnout increases, its gender equality level increases as well. In figure 4b, the case is different. Some countries such as Colombia and Mali have low average of voter turnout but have high percentage

of female ministers. There are several nations such as the US which rank very high in gender equality, but they drop when it comes to the percentage of female ministers. This concludes that the average voter turnout can determine the gender equality levels in a nation but not necessarily improve the female political representation.

E. Gender Equality and Female Ministers by Education

The fifth A hypothesis suggests that there is a positive relationship between the mean years of education among adults and gender equality level. The fifth B hypothesis states that there is a positive relationship between the mean years of education among adults and the percentage of female ministers. The dependent variables are the same, but the independent variable chosen in this case is 404) EDUCATION. All the variables have ratio level of measurement, which means that Scatterplot is used as the presentation technique.
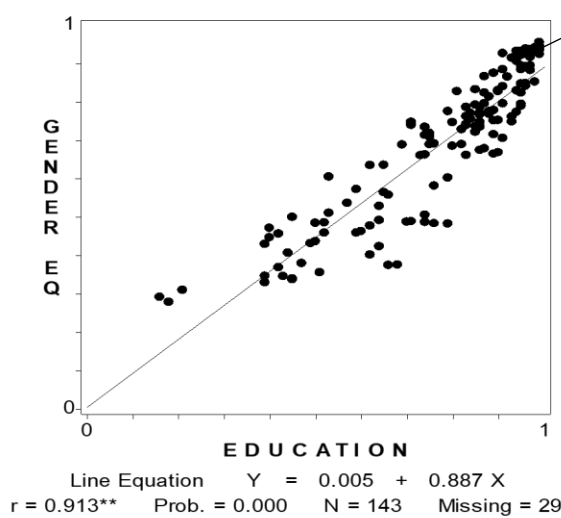

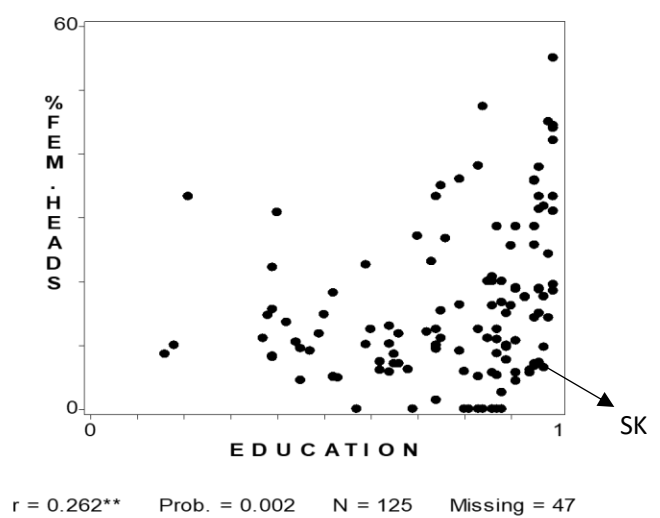| Figure 5a	Figure 5b
Gender Equality by Education	Percentage of Female Ministers by Education

For hypothesis A, the p value equals 0.000, which is statistically significant. Also, the r value is 0.913 which suggests that there is a very strong positive relationship between the variables. For hypothesis B, the p value is 0.002, which is still considered as statistically significant as well. However, the r value here equals 0.262 and this means that this relationship is very weak. Therefore, the first hypothesis is supported while the second one is not.

From figure 5a, it is obvious that education is one of the most significant factors when it comes to improving gender equality levels. In other words, the more educated people are in a country the more levels of gender equality they have. This is because education shapes the way people think including policymakers. Whenever a society is exposed to more education, people in that society tend to have more qualifications to be all equal. For example, in some societies, females might not have the same rights to attend schools therefore, they have less professional skills to occupy the same jobs as males. However, education might not be a significant reason for female political representation. For example, there are countries such as South Korea that have high levels of education, but they rank the lowest when it comes to the percentage of female ministers. This can be resulted from other factors such as culture.

F.   Gender Equality and Percentage of Female Ministers by Region

The sixth A hypothesis states that countries which are in the Western hemisphere have higher levels of gender equality. Hypothesis sixth B suggests that countries which are in the Western hemisphere have higher percentage of female ministers. The dependent variables remain the same, but the independent variable is 346) REGION. The independent variable has a nominal level of measurement while the dependent variables are ratio. Therefore, ANOVA is used as the presentation technique to illustrate the relationship between the variables.
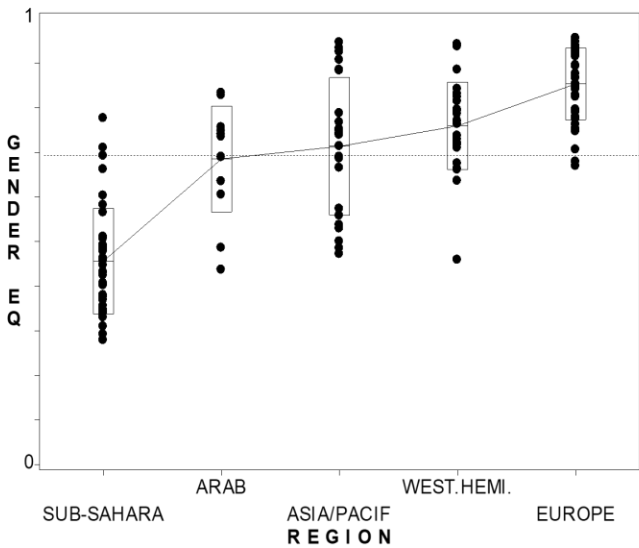
Eta² = 0.659 prob.= 0.000 N= 143 Missing

Figure 6a

Gender Equality by Region
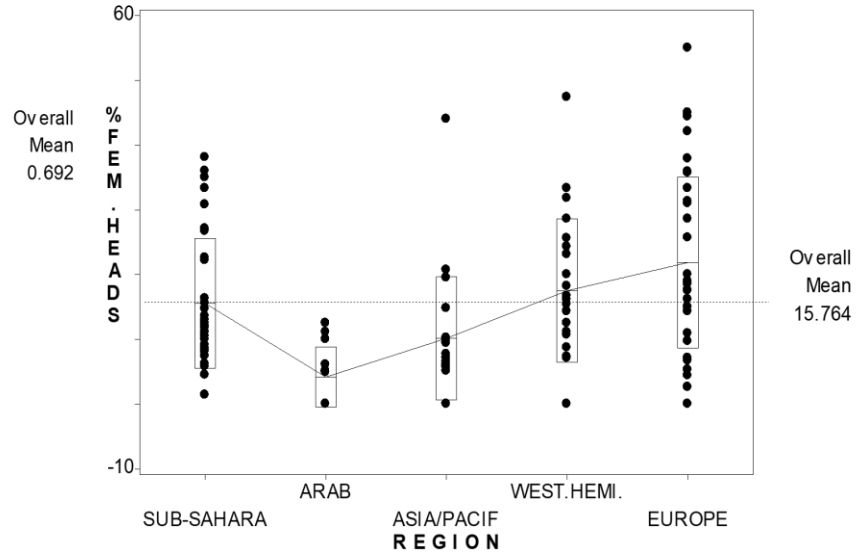
Eta² = 0.212 prob.= 0.000 N= 126 Missing = 46

Figure 6b

Percentage of Female Ministers by Region

For both hypotheses, the p value is 0.000, which means that this relationship is statistically significant. For hypothesis A, the Eta Squared equals 0.659, which concludes that there is strong positive relationship between the two variables. Figure 6b shows that the Eta Square value is 0.212, which indicates that the relationship is moderate. When looking at the average line crossing all categories in both figures, one can easily notice that in figure 6a Europe has the highest levels of gender equality. Therefore, the first hypothesis is not supported. The average line in figure 6b shows small difference between the categories "Europe" and "Western hemisphere", which conclude that the hypothesis is moderately supported.

Region here represents the culture. The reason for such patterns in both figures might be resulted from the fact that most European countries support women's rights and gender equality. The regions of Sub Sahara and Arab have the least gender equality levels and percentage of

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female ministers. This might be because of cultural obstacles that females face in these regions such as lack of education, patriarchy, and stereotypes of female social roles. Since South America is counted in the Western hemisphere region, it can be understood why this region has less levels of gender equality and female leadership. Most countries of this continent are less developed, which means that they still need to improve social, political, and economic conditions.

G. Gender Equality and Percentage of Female Ministers by Freedom of the Press

The seventh A hypothesis suggests that there is a positive relationship between the freedom of the press in a country and its levels of gender equality. Hypothesis seventh B states that there is a positive relationship between the freedom of the press and the percentage of female ministers. Both dependent variables are the same as the previous ones. The independent variable here is 484) FREE.PRESS which is also a ratio variable. Therefore, a Scatterplot is used as the presentation technique.

Both hypotheses have a p value of 0.000, which suggest that this relationship is statistically significant since there is a 0% chance that the results are random. In Figure 7a, the r value equals 0.560 and for Figure 7b, the r value is 0.455. Both values conclude that there is a strong positive relationship between the variables. This, therefore, confirms that both hypotheses are supported.
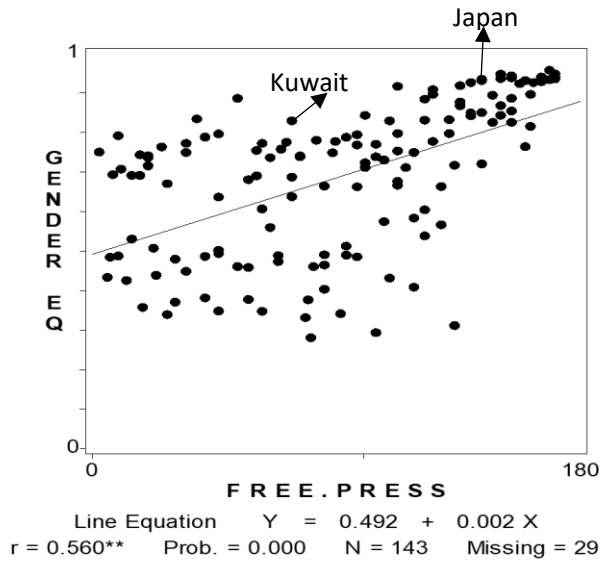
Figure 7a
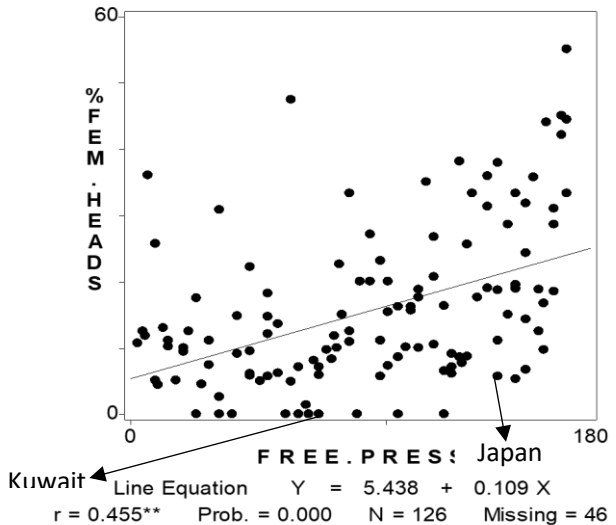
Gender Equality by the Freedom of
the Press

Figure 7b

Percentage of Female Ministers by
the Freedom of the Press

The freedom of the press means the freedom of information and its flow in the society. It is

through the press that people can learn more about the conditions surrounding them and can

critically analyze them. Every time that a country such as Japan has a high press freedom levels,

people in that country can enjoy more gender equality. However, high freedom of the press does

not guarantee high percentage of female ministers such as the case of Japan and Kuwait that drop

in Figure 7b after ranking higher spots in Figure 7a.

H. Gender Equality and Percentage of Female Ministers by Net Migration

The eighth A hypothesis suggests that there is a positive relationship between the average

annual number of migrants and the levels of gender equality. Hypothesis eighth B states that

there is a positive relationship between the average annual number of migrants and the

percentage of female ministers. The dependent variables remain the same, but the independent

variable is 54) NETMIGRT. All variables are ratio which means that the presentation technique is Scatterplot.

Although the p values in Figure 8a and Figure 8b are 0.016, and 0.013 respectively, the r values of 0.179 and 0.199 indicate that this relationship is very weak. For example, the US and Canada have the same levels of gender equality, but they dramatically vary in their net migration. Also, Figure 8b shows that many countries such as Colombia and Sudan that almost have the same number of net migration but different percentage of female ministers. In addition to that, the two graphs show that there is no clear pattern therefore, the two hypotheses are not supported.
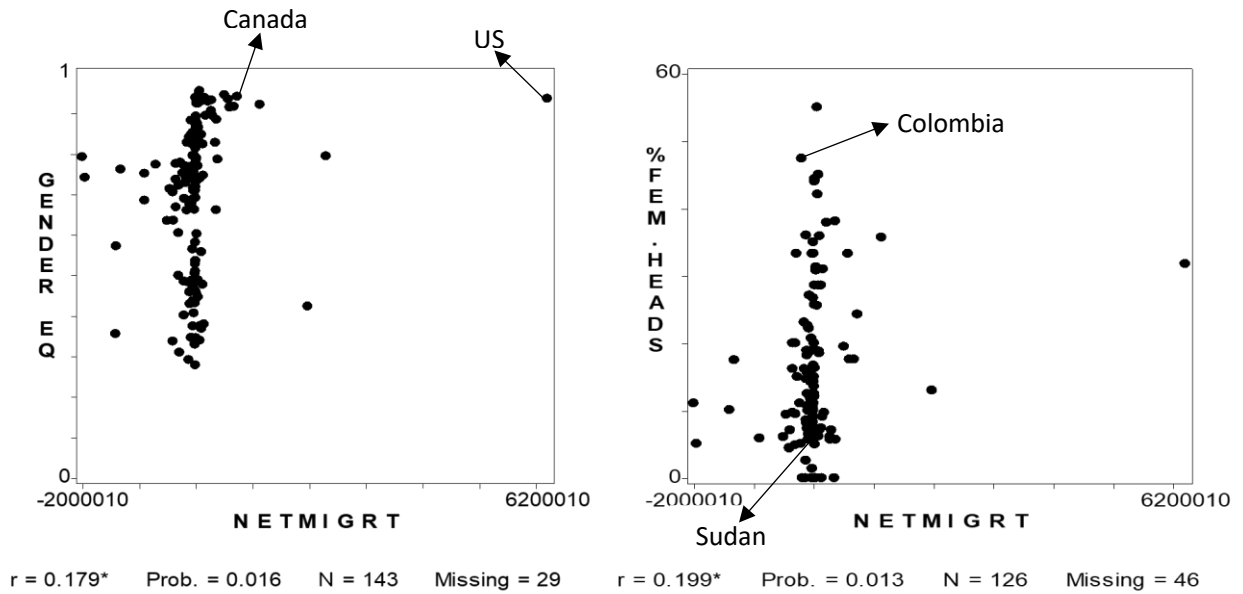
Figure 8a

Gender Equality by Net Migration

Figure 8b

Percentage of Female Ministers by
Net Migration

Even though migration can mean new ideas entering countries and exiting from others, it does not mean that this phenomenon can change social and political principles. In both figures, countries with the same net average annual number of migrants have different levels of gender equality and percentage of female ministers. Therefore, migration is not a significant factor influencing these two qualities.

I. Gender Equality and Percentage of Female Ministers by Economic Freedom

Hypothesis ninth A states that there is a positive relationship between the economic freedom level and the level of gender equality. Hypothesis ninth B suggests that there is a positive relationship between the economic freedom level and the percentage of female ministers. The dependent variables are the same as the previous ones, but the independent variable is 485) FREE.ECO1. Since all variables are ratio, Scatterplot is chosen to be the presentation technique.
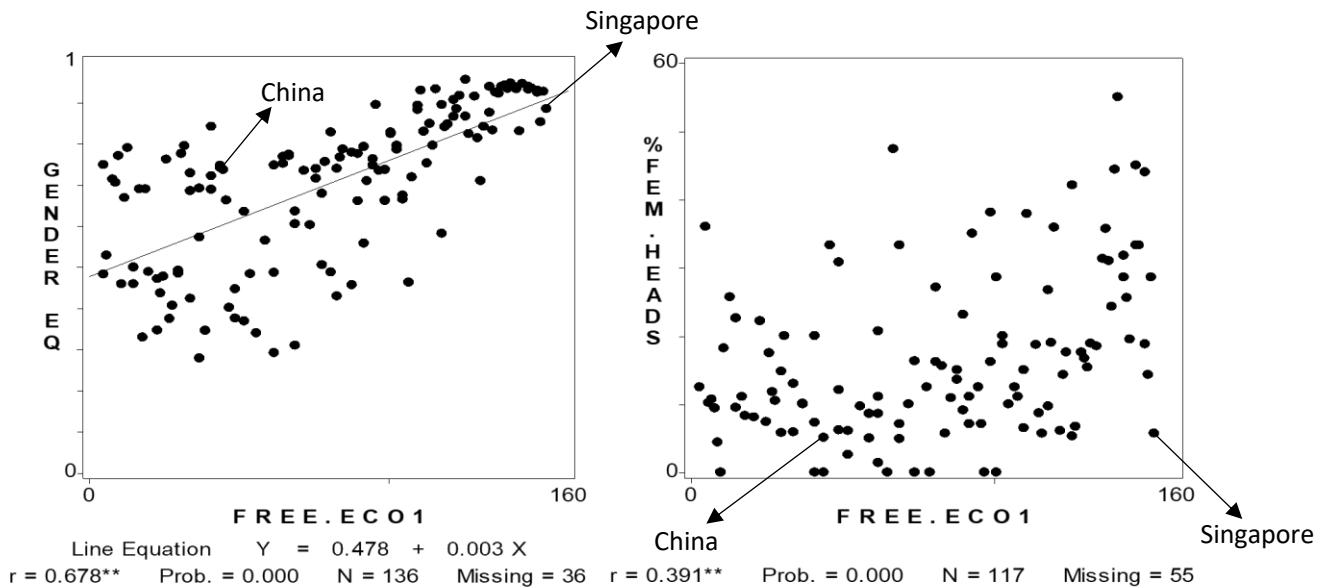

Line Equation   Y = 0.478 + 0.003 X
r = 0.678**   Prob. = 0.000   N = 136   Missing = 36   r = 0.391**   Prob. = 0.000   N = 117   Missing = 55

Figure 9a

Gender Equality by the Freedom of Economy

Figure 9b

Percentage of Female Ministers by the Freedom of Economy

Both hypotheses have a p value of 0.000, which suggests that there is a 0% chance that this relationship is random. For hypothesis A, the r value equals 0.678 which concludes that this is a strong positive relationship. Hypothesis B, however, has an r value of 0.391 which suggests that this relationship is moderate. In both cases though the hypotheses are supported.

Economic freedom means free trade and active economic sector. To adopt such development, a country is required to offer opportunities for the public without restriction on the gender or other characteristics. It cannot be possible for a country to encourage economic development but limits the number of workers by selecting who can work. Therefore, countries such as Singapore that have high economic freedom tend to have also high levels of gender equality. However, the data shows that economic freedom might influence the percentage of female ministers but it is not a significant factor. An illustration of this argument is noticeable in the drop of countries such as Singapore and China in figure 9b when they ranked higher in Figure 9a. This suggests that sometimes political and economic policies might not have direct impact on each other.

J.   Gender Equality and Percentage of Female Ministers by Poverty

The tenth A hypothesis suggests that there is a negative relationship between the number of people living on less than 1$ a day in a country and the levels of gender equality. The tenth B hypothesis states that there is a negative relationship between the number of people living on less than 1$ a day in a country and the percentage of female ministers. To test these hypotheses, the same dependent variables are used but the variable 175) POP<1$DAY is used as the independent one. All these variables have a ratio level of measurement which means that a Scatterplot will be chosen as the presentation technique.
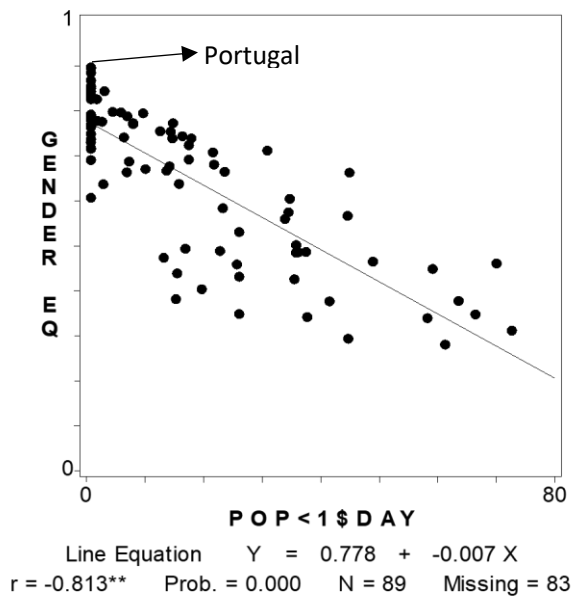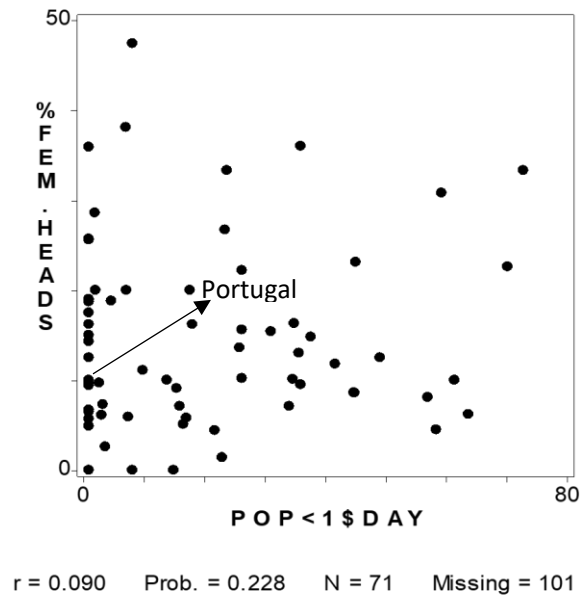
Figure 10a

Gender Equality by Poverty

Figure 10b

Percentage of Female Ministers by Poverty

Since the independent variable deals with extreme poverty, most of the cases are developing countries. In Figure 10a, the p value equals 0.000 and the r value is -0.813. This suggests that there is a strong negative relationship between the variables. In Figure 10b, however, the p value is 0.228, which means that there is 22% chance that this relationship is random, and that this relationship is not statistically significant. The r value equals 0.090 which indicates that the relationship is very weak to be useful. Based on the information provided above, one can conclude that hypothesis A is supported while hypothesis B is not.

As expected, poverty can weaken the ability for people to perform their best. Also, countries that have a high percentage of poverty cannot have time to solve issues such as gender disparities since they have more critical problems as poverty to solve. For example, Mali that has 72.8% and Niger with 61.4% of their population living on less than $1 per day might prioritize

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solving serious problems such as poverty over gender matters. Surprisingly though Nigeria that have gender equality level of 0.46 a value that is higher than Mali's but have more population living on less than 1$ than the one of Mali.

The information provided in Figure 2 however shows that poverty does not influence the percentage of female ministers. For example, Mali that is considered the poorest in the sample ranks fifth in having the highest percentage of female ministers after Colombia, South Africa, Zimbabwe, and Hungary. This indicates that poverty is not an obstacle for females to be politically represented. Also, the drop of Portugal in Figure 10b, concludes that female political representation is not strongly linked to gender equality.

Illustration 2: Findings and analysis summary for gender equality

Variables	M.O.A	Relationship Strength
Education	r = 0.913	Strong
Poverty	r = -0.813	Strong negative
Economic Freedom	r = 0.678	Strong
Region	Eta² = 0.659	Strong
Political Stability	r = 0.658	Strong
The Press	r = 0.560	Strong
Political Engagement	r = 0.497	Strong
Voting	r = 0.470	Strong
War	Eta² = 0.185	Weak
Migration	r = 0.179	Weak

Most influencing factors

Least influencing factors

Illustration 3: Findings and analysis summary for the percentage of female ministers

Variables	M.O.A	Relationship Strength
Political Engagement	$r = 0.507$	Strong
The Press	$r = 0.455$	Strong
Political Stability	$r = 0.401$	Strong
Economic Freedom	$r = 0.391$	Moderate
Region	$Eta^2 = 0.212$	Moderate
Education	$r = 0.262$	weak
Migration	$r = 0.199$	Weak
Voting	$r = 0.169$	Weak
War	$Eta^2 = 0.091$	Weak
Poverty	$r = 0.090$	Weak

Most influencing factors

Moderate influence

Leas influencing factors

V.   Conclusion

Gender equality has been a very debatable topic over the last few decades. Besides the controversy of defining the term itself, there are many questions raised about the elements that establish it. There are many fields that can be examined when investigating this issue. The political representation of the two genders in a place can mean the existence of high levels of gender equality in that place. This study looks at the possible factors that contribute to the establishment of gender equality in general and within political participation. In order to identify these factors, three categories have been explored: Political, social, and economic. To find concrete answers to this issue, the researcher was guided by the research question: "What kinds of nations have greater gender equality in political roles?" the two dependent variables gender equality and the percentage of female ministers are tested through various hypotheses to reach a finite answer.

This study acquired its data from the MicroCase (2013), the Global file. The section about data and analysis provides explanations to the results. According to the findings, nations with higher freedom of economy, more educated adults, less poverty, and higher political stability and higher freedom of the press tend to have higher levels of gender equality. Also, countries that are located in the European region, with higher political engagement globally, and have greater voter turnout are characterized with greater gender equality. By observing these results, one can conclude that economic factors (free economy and poverty) have the strongest impact on gender equality patterns. Wars and migration are the least significant variables that influence gender equality levels.

Looking at each variable out of their categories, education has the greatest effect on gender equality in nations. This finding can be explained by the qualities that education has in

shaping the way people perceive things. It is understandable that nations with higher education levels among adults will have less gender disparities. Adults are the decision makers and law evaluators. If this population is educated, better outcomes are guaranteed in national systems. They will apply critical thinking when enforcing a law and the chances that they will discriminate one gender are less than in countries where adults are less educated.

Compared to gender equality, the percentage of female ministers is not influenced by the same factors. It is only nations with higher political engagement globally, greater freedom of the press, and more political stability that have higher percentage of female ministers. The nation's levels of economic freedom and its region (culture) have only a moderate effect on the female political representation. Surprisingly, the education among adults in a nation has a very weak impact on this dependent variable. Also, poverty that is a very significant determiner of gender equality in general, is one of the least affecting factors besides migration, voter turnout, and war on the percentage of female ministers. Compared to gender equality, political factors are the most significant determiner of female political representation in ministries in any nation.

The political engagement of a nation in the international community is the strongest element that channels the percentage of female ministers to proliferate. Taking parts in intergovernmental treaties and international agreements, increases the chances for a nation to respect human rights and protect gender equality. Being an active member of this community puts pressure on a nation to follow the rules so it avoids foreign penalties and sanctions for violating agreements. When comparing the results of the two dependent variables, one can observe another surprising conclusion about the interrelationship between them. Since gender equality levels are increased by some factors that are not the same for the percentage of female ministers, it is right to say that female political representation is not an indicator of gender

equality. For example, countries such as Israel, South Korea, Singapore, and Kuwait have high levels of gender equality but low percentages of female ministers. It is therefore, other elements that are not the female political participation which account for this equality.

The findings and conclusions that this study provide will serve as a guide for policymakers to improve the factors that increase these two life qualities. Since nations with the greater levels of gender equality and higher percentages of female ministers are highlighted, other nations can use them as a model to follow. Moreover, this study will contribute to other comparative studies where the results can be used by researchers to spot differences. In addition to that, this is a replicable study which allows researchers to adopt the same methodology to look at the changes in the issue over time.

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Author's Biography

Haja Mohamed Nafe Ali is a senior student at Methodist University. She is triple majoring in Political Science, Global Studies, and Spanish Language and Literature. She plans to graduate in May 2020. Following her graduation, she wants to do a master's program in International Relations in Europe.

While at Methodist University, Haja has been an active member in different clubs and organizations. She is the current president of MU Rotaract club, and the secretary of the Hispanic club. She is also an active member of the International and the Chess clubs. On the academic level, Haja has been a Spanish tutor since her sophomore year. This year, she received the Lawdermilk Award for outstanding students and the Professors' Spanish Award. She has also participated in a number of conferences and she is a Global Education Fellow. She also speaks four languages.

Haja is originally from Western Sahara but lives in a refugee camp in Algeria. She received the Davis Scholarship to come to Methodist University after she finished her International Baccalaureate (IB) program in Norway.