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War is peace

A Study of Relationship Between Gender Equality and Peacefulness of a State

Bachelor Thesis in Global Studies

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Abstract

Based on the previous studies, the hypothesis of this research is that the higher the level of gender equality in a state, the higher level of its peacefulness. It is a quantitative study using linear regression analysis with three variables, namely Global Peace Index (GPI) as a dependent variable, Gender Inequality Index (GII) as an independent variable and Human Development Index (HDI) as a control variable. The data of 139 states from year 2013 were submitted into Statistical Package for Social Sciences (SPSS) software. The result shows a significant and positive linear relationship between gender inequality and a high level of conflict, which confirms the hypothesis. However, HDI shows to be less reliable as a control variable due to issues with multicollinearity (heavily related independent variables). Further studies should replace the HDI with another control variable.

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Acronyms

ATT – Arms Trade Treaty

GBV - Gender Based Violence

GDI - Gender Development Index

GDP - Gross Domestic Product

GEM - Gender Empowerment Measure

GII - Gender Inequality Index

GPI - Global Peace Index

HDI - Human Development Index

IEP - Institute for Economics and Peace

LDC - Least Developed Countries

NATO - North Atlantic Treaty Organization

NGO – Non-governmental Organization

SPSS - Statistical Package for Social Sciences

UNDP - United Nations Development Programme

I. Introduction

I.1. Statement of the Problem

To strive for peace can be perceived as an utopian dream of pacifists' in the eyes of a realist. The damage on humans and nature caused by the absence of peace is not always an argument enough. However, the global economic impact of violence is 9,8 trillion US dollars annually. In other words 11,3 percent of the worlds' Gross Domestic Product (GDP) or double as much as the GDP of entire Africa. (Institute for Economics and Peace, 2014)

We live in a man's world, international politics featured by power and conflict, where the act of war is privileged as Ann Tickner (2014) states. Security studies, diplomacy and military service have just recently included women in their fields. Although, women are still rarely found in positions of leadership, and even if, they struggle with discrimination as lack of respect. (Tickner, 2014) Women are strongly under-represented in parliaments, on average they occupy 21 percent of the seats. According to United Nations Development Programme (2014), gender inequality is a significant barrier to human development. International security can not be achieved ignoring the gender inequality which promotes the norms of violence, has a negative impact on the foreign policy raising potential for involvement in militarized conflicts and initiating violence during crises. (Hudson, Ballif-Spanvill, Caprioli & Emmet, 2012)

The studies of international relations from a gender perspective are underestimated, although previous research (Acheson, Moyes & Nash, 2014; Coates & Herbert, 2008; Hudson, *etal.* 2012; Klasen, 1999; Steans, 2013) shows that the gender inequality has a negative impact on several aspects within politics, economies, development and conflicts. Gender inequality creates more violent politics.

I.2. Purpose and Significance of the Study

This study aims to investigate if there is a significant positive relationship between gender equality and peacefulness of a state. The quantitative method is established through linear regression analysis based on a theoretical framework. Investigating peacefulness of a state by statistical measures gives an insight of the in- or effectiveness of current ruling views on international relations. It gives a possibility of changing the realm of peace from an utopia into a policy objective. Since the territory of international relations is currently seized by male representatives (Tickner, 2014) and the realist perspective (Reus-Smit & Snidal, 2008), it is interesting to investigate the issue from a gender perspective. Is there a reflection of gender inequality on the level of peacefulness of a state?

I.3. Hypothesis

Based on the previous studies, the hypothesis of this research is that the higher the level of gender equality in a state, the higher level of its peacefulness.

I.4. Definition of Terms

The terms below have been defined by the author.

The term *gender* includes features of biological sex and social constructions based on sex. While discussing *gender* in this research, the emphasis is on females (in the realm of sex by legal and biological definition, and femininity as social construction) since they are the major discriminated group in the society, especially in the context of representation in politics. The study have considered most of the aspects of discrimination of women, nevertheless the factors in focus are violence, inequality and development. That means that several significant factors of women's vulnerability are excluded since they were considered as either less or not at all accurate measurements for the research.

Gender equality means that people should have the same opportunities, rights and obligations regardless their gender.

Peacefulness in the context of international relations is the absence of either violence or the fear of violence in a state. The term includes the level of harmony and security within the state and its attitude towards external actors. Involvement in domestic or international conflicts is also of interest while considering peacefulness of a state.

2.Theories of International Relations

This section is a brief presentation of theories of international relations appearing in previous studies regarding the purpose of this research. Realism is the major theory in the realm of international relations. The English School is a wing within realism and its significance for this study is within the context of its perception concerning national security. The feminist theory is rather in the periphery of the international relations but it gains importance while discussing gender equality.

2.1. Realism

The realism is the major contributor in the discourse of international relations. The main assumptions within the realist theory are the politics of power and security, group solidarity in decision making, political egoism rooted in human nature and an anarchic system due to the absence of an actor above all the states. Considering the power-struggle characteristic, since there is no authority in the world system, the states (major actors) need to constantly be prepared for the possibility of disputes including violence, which is mostly done by arming themselves. (Reus-Smit & Snidal, 2008) In between the relations of states, there is no space for ethical standards. (Cox & Carr, 2001) The aspect of gender equality is not perceived as relevant in the realm of international relations. (Reus-Smit & Snidal, 2008)

The decision making process of the states is rational and based on accurate information. Sovereignty and national interest in obtaining national security are crucial within the theory. (Reus-Smit & Snidal, 2008)

2.2.The English School

Among all the theories and schools within realism, the focus of this research is on the English School of international relations – also referred to as liberal realism. It is trying to incorporate the two major theories of international relations – realism and liberalism. The English School holds to the realist assumptions, as the states interacting in an anarchic system, nevertheless, a human element from the domestic realm is added. International system and world society are the most important spheres in international politics according to the English school. (Murray, 2013) This school does not include gender as a category of analysis. (Blanchard, 2011)

2.3. Feminist Theory

The feminist theory claims that women have significant perspectives on social issues due to their experiences of being under-represented in the politics. The concept of this theory is criticism of

international relations from a standpoint of a group systematically excluded from power. (Keohane, 1989)

A common view among feminist theories is that knowledge is socially constructed, hence it is transmitted by language. The main argument of the theory is the unequal division of genders. Furthermore, it directs strong criticism towards realism. It is claimed that the realists overemphasize the role of the state in international relations, forgetting the state's internal – political and social – structure. A significant distinct characteristic differentiating the feminist theory from the realism is their constructive view on how the structures should develop, beyond the current state of phenomena's. (Reus-Smit & Snidal, 2008)

3.Theoretical Framework and Previous Research

This section consists of theoretical perspectives on international relations including previous studies regarding the hypothesis of this study. The sections are separated by point of views: English School versus feminism.

3.1. National Security – English School

As Barry Buzan (1991, p.1) claims, security is an underdeveloped concept. Nonetheless, an adequate explanation of security is the pursuit of freedom from threat. In the realm of the international system - where the state is the dominant unit – security is the ability of a state to maintain its own independent identity and functional integrity. Regarding the history of the military and economic actions of states in order to preserve their own national security, the result included conflicts and wars. The states have seemingly difficulties with coexistence in harmony. Furthermore, the political function of national security is justification of using force. A problematic aspect is that the governments can act exploitive if prioritizing their own interests – either individual or organizational – instead of the state. (Buzan, 1991, p. 18, 19, 89)

While studying the national security of the states it is important to consider the strength of a state. Indicators of a weak state according to Barry Buzan (1991) are following: high levels of political violence, strong political police towards citizens, ideology conflicts within the state, lack of a coherent identity, lack of a hierarchy of political authority and strong control over the media carried out by the government. A weak state have not succeeded to maintain a political and societal consensus and suffers of concerns in domestic threats towards the government. These consist of *inter alia* military coups, guerrilla movements, secessionist movements, mass uprisings and political factionalism. Indicators of a weak state can as well be threats of a political or societal realm. The political are organizational disruptions of the government, while the societal threat the national identity. However, the military security concerns are often masked issues of political or societal field. The states are – or have been – facing several processes perceived as threats, *inter alia* communism, capitalism, nuclear proliferation, terrorism, economic depressions and greenhouse effect. To summarize, insecurity includes both threats and vulnerabilities. (Buzan, 1991, p. 99-133)

Regarding the security policy, a state can reduce the insecurity by reducing either the vulnerabilities or preventing the threats. The last mentioned is more difficult to accomplish. Indicators defining the seriousness of a threat are its identity, distance in space and time, probability of occurring, consequences and historical context. The stronger these factors are, the more justified a response in

the realm of national security, although it is difficult to measure. A problematic aspect is the imperfect information within the policy-making spheres that leads to an unknowable extent of potential threats. This includes two points, the first that the amount of information relevant for the security politics is too huge to grasp at the same time as it changes constantly. Second point is the lack of access to correct information, either due to confidentiality or transformation of the facts within the communication chain between the politicians and providers of information. (Buzan, 1991, p. 344, 349)

Threats are difficult to perceive, a judgement of a threat may be either underrated or exaggerated. If underrated it may result in a belated preparation for assaults, on the other hand an exaggerated perception of a threat may lead to paranoia, waste of resources, aggressive policies and disturbed domestic political situation. Only few states have the resources to maintain national security (of course not entirely, hence it is not possible in the anarchic system of international relations), furthermore since it is just applicable on the state level it results in a fatally expensive and psychologically counterproductive obsession about security. (Buzan, 1991, p. 114, 115, 330, 333)

3.1.1. Defending or Threatening Itself?

Within the sphere of threats the military actions are the traditional concerns of national security. The result of military action bears high human and economic costs. (Buzan, 1991, p. 116-118) Military threats can be used by the ruling elite and turned to a strategy to ease the governing and maintain socio-political cohesion of the state. Territorial seizure and bombarding's are examples of military action, beside these the threats can be indirect towards the state and pointed towards external interests. One case is the Western interest about the security of oil supply. According to Stockholm International Peace Research Institute (2007), concerns and competition for the energy resources is an emerging factor of conflicts and tensions. It has created new alliances and cooperation's among the states. Nevertheless, the fact that the oil factor is the most significant among the energy resources increasing risk for conflict is incorrect. For instance, rich countries as Saudi Arabia can afford a good security system. Possession of a sufficient energy resource reserve makes a society safer. (Collier, 2009, p. 26-37)

On the other side, dependence on natural resources increases risk for violence, examples are the timber in Liberia, diamonds in Sierra Leone and minerals in Congo. It is confirmed by statistic results according to Paul Collier (2009, p. 126-127). When strategic materials are obtained outside the state it can become a national security issue. (Buzan, 1991, p. 126) According to a study of militarization in the developing countries, the military regimes and arms imports dependency suppress the economic

growth. Simultaneously, foreign investments and military participation promote product growth per capita. (Kick, Davis, Kiefer & Burns, 1998)

Moreover, another problematic aspect is the paradox of armed forces, hence these are both a defense instrument and a threat to the security. (Osgood & Tucker, 1967) Nuclear weapons are examples of a security dilemma. The uncertain possession and control of weapons is rather aggravating than contributing to security. Arming in purpose of self-defense may instead decrease the security by making other states insecure and ensue them to arm in response. (Herz, 1959) Despite this, external threats may not entirely be perceived as negative, but positive as well from a political perspective. It is useful in suppression of domestic political issues, contributing to political coherence and strengthening the identity of the state. In order to make the domestic tasks easier, some governments go as far as cultivating external threats. This phenomena is mostly practiced in repressive governments, nevertheless most of the states use this strategy to a certain extent. (Buzan, 1991, p.338)

3.1.2. Militarization

A weak security sector hinders the ability of violence prevention which has a negative impact on the population and development. This creates fragile and weak states with a lack of prosperity in economic growth and development. On the other side, high level of militarization can hinder development of a state by creating budget deficits in industrial, agricultural and social sectors. It is often the case in developing countries where the resources are disproportionately allocated. Generally, poor states prefer military expenditure over health spending. Additionally, high militarization can worsen good governance, lead to corruption and thereby hinder the democratization of a state. It can create or increase regional tensions as arms races (competition between actors to gain superior armed forces, further explanation in section “*Arms Races*”) and perceptions of threats. (Bonn International Center for Conversion, 2011)

Most spending on military occurs during peacetime, since external wars are rare nowadays. According to Paul Collier (2009, p. 105-106), once a country have fought a war the military spending becomes permanently higher with 1,8 percent. This shows that the cost of war continues to be a burden afterwards.

Earlier studies have shown that reduced level of military expenditure either facilitate or encourage investment and subsequently economic growth (Mintz, Stevenson & Randolph, 1995). Nevertheless, it takes about five years for such an indirect trade-off to develop as apparent and materialize. This could be observed in the context of the Cold War era and its aftermath – so called *peace dividend*, the

significant drop in the defense budget when a nation attains a higher level of peace – the militarization has obviously different effect on more economically wealthy countries. After the collapse of Soviet Union, the global military spending fell by 35 percent. (Mintz, et al., 1995)

3.1.2.1. Arms Races

Arms races occur when the states are competing with each other for supremacy in accumulation of weapons. An example is NATO (North Atlantic Treaty Organization) and the Warsaw Pact during the Cold War. (Arms race, 2015) An arms race of low intensity might be difficult to distinguish from maintenance of the military status quo in order to remain secure. The realists view the military means as a power struggle between the states. However, armed struggle becomes a less useful way of maintaining power objective when the costs and risks increases to a level of a certain massive destruction. (Buzan, 1991, p. 245)

3.1.3. Interdependency in the International System

Despite the previous arguments, the importance of military force is decreasing in the realm of international relations between market-based political economies since these become more interdependent. An example is North America and Europe with their market and security cooperation's. Today's economic system is also strongly linked with an environmental threat since the mass production pressures the boundaries of the global ecosystem. (Buzan, 1991, p.321) Energy resources have potential to be a crucial ingredient in the future intra-state conflicts. The significance of strategically important areas with oil and gas reserves will increase and create threats in the realm of vulnerability. Development of alternative energy sources could change the notion of energy security. (Stockholm International Peace Research Institute, 2007)

3.1.3.1. Stakeholders

The actual interdependency within the international system requires policies of national security to account a wider perspective than just the sovereignty of the state itself. That should include appropriate measures on individual, state, regional and system levels. (Buzan, 1991) However, no state is addressing their political resources to contribute to a significant change of the systemic effects. It is easily dismissed with arguments as lack of ability to manage the entire system by a single policy and complications in the long-term process. A contributing factor to upholding this argument are the newspapers distorting the public view of what is important and focusing on short-term issues, since it is easier to sell than presenting problems of a more abstract nature. (Buzan, 1991)

3.1.3.2. Arms Manufacturers

Beside the government itself, both industrial and commercial actors are involved in formation of the policies. Significant actors are arms manufacturers with their interests strongly influencing national security policy. Their main purposes are to achieve profit, create a demand for their product and participate in technological progress within arms industry. Governments usually share several of these objectives. (Buzan, 1987) In most of the cases, the domestic demand for arms trading is too low. A solution is to expand the market by lowering the price and exporting the goods. (Buzan, 1991)

3.1.3.3. The Impact of Arms Trade and Transfer

In general, the developed countries are providers of arms, while developing countries are receivers. (Atkinson, 1991) According to earlier studies, arms trade is causing a damage by fuelling the already existing conflicts and aggravating the underdevelopment in the developing countries. Furthermore, it is worth to mention the arms *transfers* while studying national security. In several cases the arms are not sold, rather given, for example to rebel groups (Christensen, 2015).

Militarization can have either positive or negative influence on the economic aspects of a nation. Nevertheless, the impact on the developing countries may be rather negative. It suppresses both the economic growth and political rights. (Kick, *etal.* 1998) Another indicator of development is correlated to a situation of conflict, namely food security. Earlier studies (Scanlan, Jenkins & Craig, 2001) claim that food security is especially problematic in many of the poorer least developed countries (LDCs) in combination with a prominent military power. In many cases the food aid is diverted by guerrilla and bandit armies in order to strengthen their own power, which contributes to political instability and greater famine in the country. Nevertheless, an important question is if militarization and militarism are strongly interrelated. Several studies show that the military participation, which is the ratio of troops to labour force, is different from military spending and leads to improved mortality, literacy and secondary schooling. Some claim that the international arms races spur the arms purchase and local arms production at the expense of health, nutrition, education and socioeconomic development. Others suggests that militarization gives military more resources and by that encourages praetorianism, political repression and interstate wars that undermine social welfare (Scanlan, *etal.*, 2001).

Food security is the most basic human need and as mentioned before, an indicator on development in a state. Scanlan, *etal.* (2001) chose to study this aspect in correlation to militarization and militarism.

Militarization shows to be both beneficial and detrimental to food security while militarism just detrimental. What boosts food security is a situation of military participation and arms production. The military power effects of net economic growth trickles down to investments in food supply and combating child hunger in the more developed LDCs. On the other side arms exports, increased military spending, praetorianism and military repression reduce food security.

3.2. Gender in International Relations

3.2.1. Gender Essentialism

Gender essentialism concerns beliefs creating a correlation between certain characteristics possessed by a certain gender which are fixed and natural. The social constructions in the society have served to underrate women and excluding them from public and political life with argument as women being irrational, driven by their emotions. For instance, the Greek philosopher Aristotle claimed that the masculine was an active and creative force, while the feminine rather passive. The seventeenth century philosopher John Locke held that both women and children are inferior to men because of their irrationality. (Steans, 2013) Women have been constructed as the weaker sex, especially in the context of conflict. This view is still reproduced, for instance in the Geneva Convention claiming that “women shall be treated with all the regard due to their sex”. (Acheson, Moyes & Nash, 2014) Framing women as vulnerable and in need of protection strengthens the idea of women and children being innocent, simultaneously as men are not. Males are constructed as protectors and defenders of the nation. Masculinity has been correlated as more violent and prepared to use military action. Furthermore, the notion of peace have been feminized and noted as unattainable, unrealistic and passive. These social constructions have led to men being the major participants in military roles. This increases the risk for males as forced recruitment, arbitrary detention and summary execution. (Acheson, *etal.*, 2014)

Among the early feminist movements during nineteenth and twentieth centuries there were claims about linkages between motherhood and peacefulness which led to women’s natural superiority regarding morals. Furthermore, inclusion of women in government would change the foreign policy and create a more peaceful world order. (Steans, 2013) On the other side, according to the liberal feminist movement during 1970s the gender differences were exploited as justification for exclusion of females from combat. For this reason, they argued that the feminists should support the women for their “right to fight”. (Steans, 2013, p.45-61)

Gender essentialism reinforces the gender hierarchies which works against the establishment of a

more equitable society. The previously mentioned ideas about feminine and masculine characters are reproducing the power asymmetries that underpins many acts in the realm of gender based violence (GBV (further described in section “*Gender Based Violence in Conflicts*”). The correlation between masculinity and violence together with the perception of not going to war as weakness, justifies war as positive. Simultaneously, this perspective creates a difficulty towards rejecting involvement in war, cutting military spending and striving for disarmament among political leaders. (Acheson, *etal.*, 2014)

3.2.1.1. Gender Based Violence in Conflicts

Sexual violence is an abuse more commonly used in conflicts and often directed from the highest political levels. A systematic attack on women during conflicts is made in order to destroy women and thereby entire communities. The victims of violence require medical assistance but the resources are often not enough, simultaneously as the physical, psychological and emotional damage is continuing in a long term. (Steans, 2013, p. 42)

Gender based violence (GBV) is a form of violence against a person based on their sex or gender. Women are an especially vulnerable group in violent conflicts. (Irsten, 2014) It is of significance to include women into the process of combating violence. A gender perspective is therefore relevant in the context of arms trade (Green, Basu Ray, Mortimer & Stone 2013). Arms Trade Treaty (ATT) was adopted by the United Nations in 2013 and aims to regulate the international transfer of arms and ammunition. In the set of criteria a language on the risks of GBV was officially included for the first time in the context of the arms trade which is a landmark in combating GBV and proves that the issues of women, peace and security are now a part of the realm of security. In practice this should make it harder for perpetrators to access weapons and help in mainstreaming gender issues into the security field.

3.2.1.2. Women, Militarization and Development

Military regimes (not highly militarized countries in general) reduce their health and education expenditures with increased defense burdens. The civilian regimes tend to be under pressure to increase the contribution for both defense and socioeconomics. (Looney, 1990) On the other hand, the military expenditure in developing countries, which is often very high, has a negative impact on health and education spending's. Transferring the resources from military to the civilian spending's would lead to social and economic benefits for all people – especially women - according to the feminist economists. (Steans, 2013, p. 51-68)

Women are essential to the achievement of human development. (Steans, 2013, p.51) According to Esther Boserup, women's work is vital to the social and economic well-being of societies. She demonstrates a link between the low status of women, poverty, overpopulation, illiteracy, food shortages, malnutrition and poor health conditions. (Steans, 2013, p. 51-52) A study by Stephan Klasen (1999) proves that gender inequality in education has a significant negative impact on economic growth and prevents reducing fertility and child mortality, which in turn prevents progress in well-being in developing countries.

3.2.2. Women in Decision Making

States are generally supportive of women's empowerment in policies that are focused on income generation, nevertheless often resistant to measures designed to increase the influence or representation of women in government. Anne Sibert have observed a link between the level of damage during financial crisis and level of corporate directorships. According to Anne Sibert the bigger male dominance within the directorship, the worse effect by financial crisis. (Steans, 2013, p. 52-53) Another study (Coates & Herbert, 2008) showed a significant correlation between high testosterone levels and high risk taking among stock market traders.

Parliaments are essential platforms where issues are transformed into political solutions applicable to all. Generally, there is a widespread under-representation of women in the governments. However, women parliamentarians are often channelled into politics through participation in social work, NGOs and trade unions. According to a previous study (Waring, Greenwood & Pintat, 2000), women's presence in decision making process increases the focus on issues as social welfare, legal protection, and transparency in government and business. Furthermore, the study showed that 80 percent of the respondents (female politicians) state that women's participation generates greater trust in government. A study by Mary Caprioli and Mark A. Boyer (2001) concluded that states with higher levels of gender equality use lower level of violence during crises than states with lower levels of gender equality. Mary Caprioli (2003) develops her studies and finds another linkage, namely that the states with higher levels of gender equality display lower levels of aggression and are less likely to initiate the use of force. Although, that does not necessarily mean that women are more pacific than men in their attitude toward international conflict. According to a survey by Ina Warriner and Marc Tessler (1997), having a higher amount of politicians concerned about gender equality - regardless of biological sex - is linked to more diplomatic and compromising solutions in foreign policy.

4. Research design

This section presents a detailed method of this study, namely a description of how the linear regression analysis was performed. The three chosen variables and their values are explained, followed by delimitations of this research. The research was designed based on *SPSS survival manual* by Julie Pallant (2013).

Almost all previous research presented in the section “*Theoretical Framework and Previous Studies*” used quantitative measures in their studies. Since the purpose of this research is similar, it is based on quantitative measures as well. By the use of regression analysis, we can predict the outcomes based on predictive variables. The research is based upon the linear regression process in order to explore the relationship between gender equality and peacefulness of a state. The process is divided in three steps. Firstly, in order to investigate the strength of the correlation between two variables of interest and whether it is positive or negative, a test for Pearson correlation had to be established, followed by a scatterplot. Despite the fact that Pearson correlation test indicates a relationship between variables, it does not prove that one variable causes the other. Secondly, a bivariate linear regression between two variables, and lastly, a multivariate linear regression with an additional control variable. At the moment of writing, the latest data found for all the variables is 2013. These were submitted and analysed in the Statistical Package for Social Sciences (SPSS) software.

4.1. Variables

In order to accomplish a linear regression in the SPSS, it is required that the variables consist of continuous data. Therefore the chosen variables are ratios. Two variables are related to gender equality and peacefulness, and one is a control variable measuring human development. Another control variable was considered – Gini index, measuring income distribution in a state – but due to a low availability of data it is excluded. Below follows the description for each variable and argument for its choice.

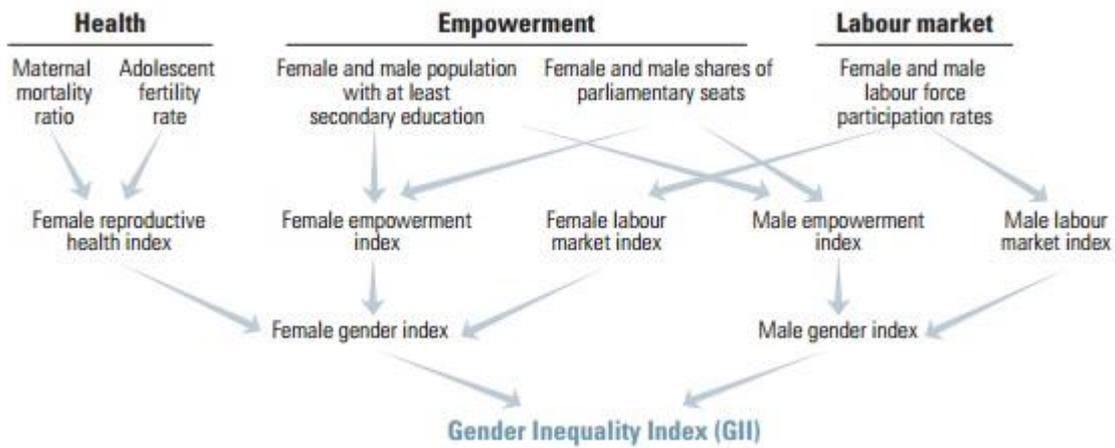
The dependent variable is Global Peace Index (GPI) created by the Institute for Economics and Peace (IEP). It is aimed to measure the level of a state’s peacefulness and ranks over 160 states annually. The score for a state starts at 1 with a high level of peacefulness and finishes at 5 where the level of peacefulness is low. However, none of the states have reached a ratio higher than 3. The index covers areas as the level of safety and security in society, domestic and international conflicts, and military expenditure. The figure below presents the 22 indicators that contribute to GPI and their weight of the total index. The data is retrieved from Institute for Economics and Peace (2014).

Figure I. GPI Index.

Internal Peace Indicators:	Indicator Weight:
Level of Perceived Criminality in Society	4 percent
Number of Internal Security Officers and Police per 100,000 People	4 percent
Number of Homicides per 100,000 People	5,3 percent
Ease of Access to Small Arms and Light Weapons	4 percent
Number of Jailed Population per 100,000 People	4 percent
Level of Organised Conflict (Internal)	6,7 percent
Likelihood of Violent Demonstrations	4 percent
Political Instability	5,3 percent
Level of Violent Crime	5,3 percent
Political Terror Scale	5,3 percent
Terrorist Activity	2,7 percent
Volume of Transfers of Major Conventional Weapons, as Recipient	2,7 percent
Number of Deaths from Organised Conflict (Internal)	3,7 percent
External Peace Indicators:	Indicator Weight:
Military Expenditure as a Percentage of GDP	2,6 percent
Financial Contribution to UN Peacekeeping Missions	2,6 percent
Number of Armed Services Personnel per 100,000 people	2,6 percent
Nuclear and Heavy Weapons Capabilities	3,9 percent
Volume of Transfers of Major Conventional Weapons as Supplier	3,9 percent
Number of Displaced People as a Percentage of the Population	5,2 percent
Relations with Neighbouring Countries	6,5 percent
Number of Deaths from Organised Conflict (External)	6,5 percent
Number of External and Internal Conflicts Fought	6,5 percent

The independent variable is Gender Inequality Index (GII) introduced in 2010 by United Nations Development Programme (UNDP) as a replacement for Gender Development Index (GDI) and Gender Empowerment Measure (GEM). GII measures inequality between women and men in the areas of reproductive health, empowerment and the labour market. The values start at 0 standing for high level of gender equality and finishes at 1 which is a low level of gender equality. Although, none of the states have reached a ratio higher than 0,7. This variable measuring gender inequality was chosen instead of measuring level of women's representation in order to avoid gender essentialism. The figure below presents the indicators and the structure of the index. The data is retrieved from

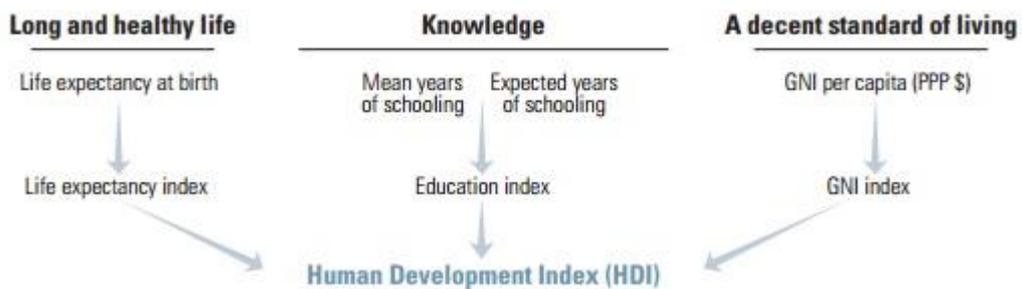
Figure 2. GII Index.



Source: United Nations Development Programme (2014a)

The control variable is Human Development Index (HDI) introduced in 1990 by UNDP and measures achievements in key dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. These aspects of human development are correlated with democracy (Gerring, J., Thacker, S., Alfaro, R., 2007) which leads to higher level of peacefulness in foreign relations, according to democratic peace theory. (Democratic Peace Theory, 2012) The values start from 0 which stands for low level of human development and finish at 1 which is high level of human development. The figure below presents the indicators and the structure of the index. The data is retrieved from United Nations Development Programme (2014a & 2014b).

Figure 3. HDI Index.



Source: United Nations Development Programme (2014a)

The aim of this study is to investigate by quantitative data if there is a significant positive relationship between gender equality and the level of peacefulness of a state. The values of the variables need to be considered. Despite that the aim of this study claims to investigate positive values – gender equality

and peacefulness – the values of the variables indicate on contradictory as level of inequality and conflict. The higher ratio in GPI, the worse situation of peace. The higher ratio of GII, the higher level of gender inequality. However, the higher ratio of HDI indicates on higher level of development.

4.2. Delimitations

Previous research concerning situation of women in correlation to peace and security by Hudson, *etal.* (2012) used GPI as a dependent variable as well. However, they did not correlate the GPI with GII, since their emphasis was specifically on the situation of women in a state, not necessary gender equality. Although GII is an improved version of previous measurements of gender inequality by UNDP, it does not include the informal sector where women tend to represent the majority of the unpaid labour. (Klasen & Schüler, 2011)

Worth mentioning is also the relevance (or irrelevance) of using the same measurement in a global context. LDS states have significantly lower results but their performance may vary regionally.

One could argue that additional independent variables should be included in the regression process. On the other hand, the complexity of the indicators within the chosen variables can cause causality problems. Furthermore, due to absence of data in some variables, 139 states out of 196 were investigated which may lead to a less accurate estimation of a global level.

5. Result

This section presents the empirical result of this study. It is divided in two parts. Firstly, a presentation of the results for Pearson correlation for the three chosen variables, secondly, a presentation of the result for bivariate and multivariate regression analysis. Figures illustrating the result are included.

5.1. Pearson Correlation

The relationship between gender equality and peacefulness was measured with Pearson correlation coefficient based on data of 139 states ($N = 139$). The figure 4 illustrates that all the data have a significance level of $p < ,001$. The strongest correlation is between the independent variables GII and HDI ($r = -,880$) which may indicate a multicollinearity problem since the correlation exceeds ,8 threshold. Considering the dependent variable GPI, the stronger correlation is with GII ($r = ,617$) than with HDI ($r = -,568$). As a reminder, HDI is the only variable showing a positive situation by increasing values, despite the GII and GPI indicating a worsening situation by increasing values. Therefore the relationships between HDI and GPI, as well as between HDI and GII are negative. The relationship between GPI and GII is positive.

Figure 4. Pearson Correlation.

	GII	GPI	HDI
GII		,617**	-,880**
GPI	,617**		-,569**
HDI	-,880**	-,568**	

** $. p < ,001$ (2-tailed). $N = 139$

5.2. Bivariate and Multivariate Regression

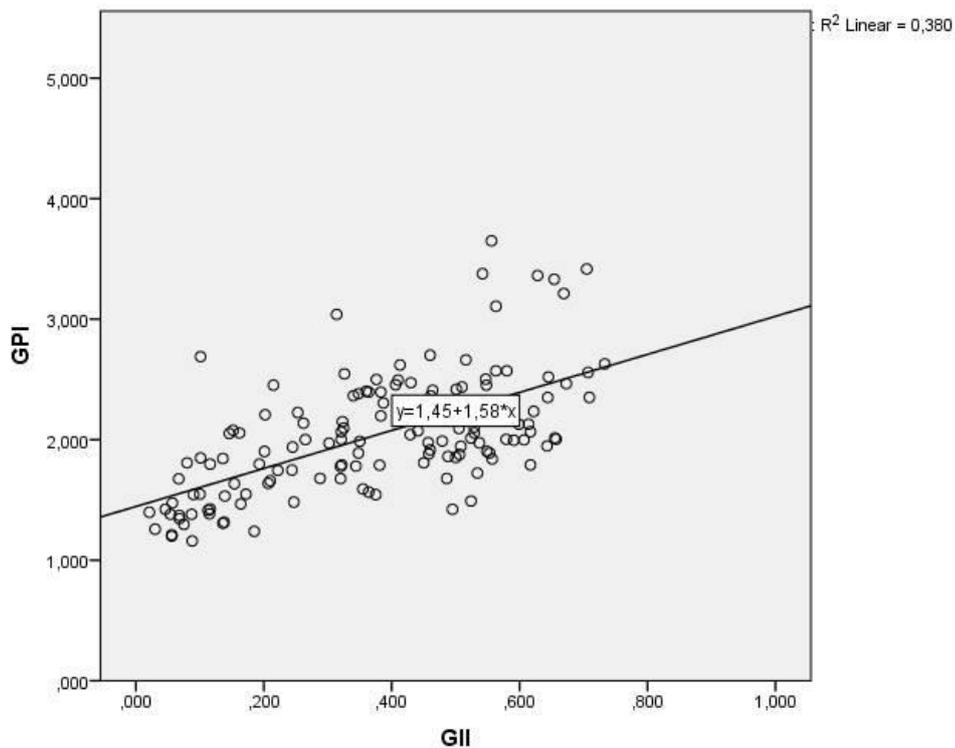
The regression process is divided in two models. The first model, a bivariate regression was accomplished in order to measure the relationship between the dependent variable GPI and the independent variable GII. In the second model, HDI was added as a control variable for the multivariate regression.

Figure 5. Regression analysis.

	Model 1		Model 2	
	B coefficient	P value	B coefficient	P value
GII	1,578	,000	1,338	,000
HDI			-,340	,434
N	139		139	
Adjusted R2	,375		,375	

Figure 5 shows that the result of the bivariate regression indicates that the variation between dependent variable GPI can be explained to the extent of 37,5 percent (Adjusted R2 = ,375) by the independent variables GII. The regression model predicts the GII variable to be statistically significant (p = ,000). The multivariate regression shows the absence of significance for the independent variable HDI (p = ,434). The bivariate regression between GPI and GII resulted in a positive linear relationship and equation $GPI = 1,45 + 1,58 (GII)$. The increase of one unit of GPI is an increase of 1,58 of GII. This is presented in figure 6.

Figure 6. Scatterplot.



6. Analysis

Based on the previous studies, this research is based on a hypothesis that the higher the level of gender equality in a state, the higher level of its peacefulness. This section reviews the result of this research.

The bivariate and multivariate regression shows a strong positive relationship between dependent variable GPI and the independent variable GII. The variation between the dependent variable indicating on the level of peacefulness of a state and independent variable indicating gender inequality of a state is 37,5 percent, in accordance to the result of Adjusted R2 (Adjusted R2 = ,375). A high ratio of GPI indicates on a low level of peacefulness. A high level of GII indicates on a low level of gender equality. In other words, the more gender inequality, the less peacefulness in a state. That confirms the hypothesis proposed in the beginning of this research that the higher the level of gender equality in a state, the higher level of its peacefulness. Furthermore, it strengthens the results of previous studies by Marie Caprioli and Mark Boyer (2001). They concluded that states with higher levels of gender equality use lower level of violence during crises than states with lower levels of gender equality. Moreover, the result of this study is strongly correlated to previous research by Ina Warriner and Marc Tessler (1997), concluding that having a higher amount of politicians concerned about gender equality is linked to more diplomatic and compromising solutions in foreign policy.

Although the result of regression analysis shows a strong relationship, it does not by necessity reflect that the one variable causes the other. It is highly possible due to previous studies but it is not definitely certain since there are statistical deficiencies in the chosen variables. In order to find if there is a possibility that there are different variables explaining the relationship better, additional control variable was included, namely HDI. Indeed it showed to have a strong negative correlation with the other variables. Nevertheless, the strongest correlation between the two independent variables GII and HDI ($r = -,880$) causes a multicollinearity problem. Therefore, there is a risk for a low reliability in the multivariate regression with HDI as an control variable.

The fact that the result indicates on a positive and not negative relationship is of importance. If the result would be a negative linear relationship, it would indicate that higher level of gender inequality is correlated to higher level of peacefulness. However, that is not the case. If taking previous studies into consideration, the result of this regression analysis showing a positive linear relationship between gender inequality and conflict is highly reliable. The hypothesis that the higher the level of gender equality in a state, the higher level of its peacefulness is corroborated, indeed. Furthermore, gender showed to be an important category for analysis of peacefulness. Therefore the feminist theory is a relevant approach to explain the international relations, in comparison with the absence of gender

categories in realism and English school.

6.1. Recommendations for Further Studies

Further studies investigating the relationship between gender equality and peacefulness of states using regression analysis should deeply consider the choice of variables. Since an index is a complex measure including a certain amount of indicators, it can lead to causality problems and difficulties with finding appropriate control variables. Less complex variables should be preferred in further studies. An interesting method would be to deconstruct the indexes and use their indicators as separate variables to find more specific relationships.

Another suggestion for further studies is to investigate different cases by dividing them regionally or according to their level of development. These factors may have an impact on the result and would lead to more specified relationships between variables. A study of the hypothesis of cases during a period of conflict would be interesting in order to see if gender equality is a significant factor.

It is of importance to avoid the problematic gender essentialism due to its biased perception of sexes. If claiming that one of the sexes has specific characteristics, one has to be careful. For that reason, this research is based on a hypothesis about gender equality in correlation to peacefulness and for instance not that males are biologically more violent than females.

7. Conclusion

Based on the previous studies, the hypothesis of this research is that the higher the level of gender equality in a state, the higher level of its peacefulness. In order to investigate the hypothesis, a quantitative method was chosen. The author used linear regression analysis with three variables, namely Global Peace Index (GPI) as a dependent variable, Gender Inequality Index (GII) as an independent variable and Human Development Index (HDI) as a control variable. The data of 139 states from year 2013 were submitted into Statistical Package for Social Sciences (SPSS) software. The result showed a significant and positive linear relationship between gender inequality and a high level of conflict, which confirms the hypothesis, the higher the level of gender equality in a state, the higher level of its peacefulness. However, HDI shows to be less reliable as a control variable due to issues with multicollinearity (heavily related independent variables).

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