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## Gender Inequalities and International Military Aggression: The Role of Feminism in Achieving Peace

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# GENDER INEQUALITIES AND INTERNATIONAL MILITARY AGGRESSION: THE ROLE OF FEMINISM IN ACHIEVING PEACE

Katie Heaney

**Abstract** *International relations scholars have often looked to domestic state composition and structure to examine root causes of interstate behavior, specifically disputes. This research study adds to this growing body of literature by using a feminist perspective to analyze the relationship between state-level gender equality and international military disputes. I hypothesize that those nations with lower fertility rates and higher representations of women in parliament, both variables taken together to represent gender equality, will engage in fewer and less hostile military disputes. The findings of this study confirm my expectations; nations that ascribe to egalitarian ideals and practices typically extend this framework to their international relations as well. It is therefore suggested that future studies in peace consider the positive effects gender equality has upon domestic and international relations.*

## Introduction

Scholars of international relations, a largely male-dominated discipline, have typically looked to traditional power structures and coalition composition to explain interstate behaviors and conflicts (Regan & Paskeviciute 2003). However, in recent years, feminist literature has criticized this male-defined viewpoint for focusing entirely on regime characteristics without investigating possible societal explanations (Regan & Paskeviciute 2003). These feminist scholars argue that the male domination of international relations studies relies on a masculine conception of power relationships and structures without considering the unique role women play (Regan & Paskeviciute 2003). It is then crucial to consider an alternative, feminist viewpoint in order to more accurately understand international power relations. The foundation of this feminist stance is based on the argument that domestic political actions and values will be reflected in a state's international actions; in other words, those states that breed conflict at home through structural inequalities will be more likely to seek conflict abroad (Caprioli 2003). Mary Caprioli (2000, 2001, 2003) largely pioneered the expansion of this broader argument to focus on the causal relationship between gender inequality and interstate conflict. The present study seeks to further develop her work by updating the quantitative analysis of military conflicts, expanding the theoretical basis for understanding women as peacemakers, and studying how the military aggressions of those nations with higher levels of gender equality differ from those with greater inequalities.

Many of the world's women have seen greatly increased social, political, and economic equality in recent decades, though no state today can boast a truly gender-equal society. This study will argue that those states with higher gender equality will be more pacific in nature, with less frequent military aggressions. Research on this topic provides several theoretical explanations for this relationship. Some feminist scholars argue that the systematic subordination of women by states relies on the belief that women are inferior, and that these patterns of discrimination, hostility, and subordination carry over into interstate interactions (Caprioli 2000). Others point to the gendered differences in viewpoints on war and peace. Before ultimately outlining the importance of feminism in achieving international peace, the next section details both theoretical frameworks in order to better explain the basis for my hypothesis.

## Domestic vs. International State Behavior

The first theoretical framework for the argument that gender inequality causes interstate military aggression is founded in the extension of domestic structural hierarchies to international behaviors. These feminist scholars argue that a structural system that breeds norms of violence and oppression will extend these behaviors to the international level because a culture of superiority and subordination will be reflected in the decision-making processes of those states' leaders (Caprioli 2003). Those states that are committed to structural equality will support freedom and diplomacy while also rejecting hierarchical subordination and the use of force or aggression (Caprioli 2003). As such, the more a society values structural equality, the more likely it will reject military aggression as a viable solution to interstate disputes. Gender inequality remains one of the most prevalent forms of structural inequality worldwide; therefore, it follows that this broader theory is, at least in part, behind the causal relationship between gender inequality and military aggression.

### The Gender Gap in Opinions on War

The second theoretical framework behind my research question involves the so-called "gender gap" between men's and women's views on the use of military force. This framework is divided into two main groups: the "essentialists" vs. the "constructivists;" in other words, nature vs. nurture, respectively (Melander 2005). A third group, called the "consequentialist" perspective, focuses more on the role that women's interests play in their differing views on military aggression. In the next section, I will describe each theory in detail and explain how each provides support for my hypothesis.

#### *Essentialism*

Proponents of the essentialist argument, at the most extreme end of the theoretical continuum, contend that women's natural reproductive role leads them to an inherent and compassionate aversion to violence, extending their role as caregiver from the personal to the international level (Melander 2005). This belief is based on the fundamentally unalterable differences between men and women, such as higher levels of testosterone in males and the birthing capabilities of women (Nincic & Nincic 2002). Carol Gilligan (1982) found that women consistently demonstrated the tendency to care for others and to prefer "harmonious human relations" to personal achievements and conquests, while men were more likely to value competition and rivalry. Essentialists argue that women's biological maternal instincts lead them to reject a distinction between individual and collective forms of violence, viewing both as equally objectionable (Melander 2005). Because essentialists believe the gender gap stems from biological differences, they do not believe that the gap can be closed; in other words, men will not become more peaceful, nor women more aggressive (Nincic & Nincic 2002). The essentialist argument leads us to infer that when women are more equal in a society, and therefore able to influence political action, states will be less likely to initiate aggressive military force, which contradicts women's natural caretaking disposition (Melander 2005).

#### *Constructivism*

Some feminist scholars challenge the essentialist point of view, insisting that it only serves to reinforce traditional feminine stereotypes that support their continued subordination by men, and

that there are no “essential components” that define all women (Melander 2005). These scholars often instead support the constructivist point of view, which argues that female aversion to violence is not biologically inherent but rather associated with socially constructed definitions of femininity (Melander 2005). From this viewpoint, men are “assigned” to the masculine role of potential warrior, valuing honor and one’s manhood, while women are assigned the roles of the male’s audience in front of which men must perform their strength (Melander 2005). Feminist constructivists argue that when men and women are forced to conform to these traditional gender roles, men will seek violent action and the establishment of domination (Melander 2005). Constructivists believe that evolving cultural norms and stereotypes could modify the current ‘social construction’ of gender and therefore close the gender gap; however, gender roles today are deeply entrenched in society (Nincic & Nincic 2002). If it is true that men are more aggressive than women because of their learned tendency to behave like “warriors,” then as long as men continue to dominate political power and society, state policies will reflect those macho-militant norms (Caprioli 2003). If this is indeed the case, I would then expect to find that those cultures that enforce strict gender roles upon their citizens will more often seek aggressive action in the international arena. Furthermore, those states that reject these traditional roles will replicate that pattern of equality and diplomacy in their relations with other states.

### *Consequentialism*

Instead of addressing inherent or constructed explanations for women’s differing views on war, the third perspective, consequentialist, identifies women’s interests as the basis for the gender gap in military aggression opinions. From this perspective, women’s propensity to oppose military action stems from the fact that they are increasingly the major victims of war (Nincic & Nincic 2002). Though they may not participate proportionally in the frontlines of battle, women suffer disproportionately as civilian targets and from the contextual results of modern war – sexual violation, widowhood, poverty, loss of sons and husbands, the responsibility to care for victims, etc. (Nincic & Nincic 2002). Feminist scholars argue that war is “particularly devastating to women in ways that matter most to them...apart from the issue of sexual violence, there is the fact that the majority of those displaced by war are women and children” (Nincic & Nincic 2002). Therefore, in weighing the costs and benefits of possible military action, women are likely to consider the variety of risks at hand for themselves and ultimately oppose aggressive action.

### **Feminism’s Role in the Pursuit of Peace**

Having investigated several theoretical frameworks for understanding military aggression, it is important to understand how feminism (and the resulting societal gender equality that stems from the acceptance of its tenets) plays a role in establishing peaceful societies. Feminism is the belief that women and men are equal, have the right to equal opportunity, and have the right to be free from discrimination on the basis of sex. Those nations that ascribe to the beliefs of feminism (whether labeling it as such or not) reflect a commitment to its values: democracy, freedom, equality, and self-government (Conover & Sapiro 1993). Furthermore, it is not just the commitment to democratic values that connects feminism and feminist societies to an antimilitaristic worldview, but the actual application of those values in society. Feminist theory of democracy involves a rejection of “hierarchy, domination, and the use of force or exploitation; moreover, it specifically identifies the military as bastion of sexism” (Brock-Utne 1985). Societies characterized by overt sexism and structural violence against women tend to exhibit these same aggressive, subordinating traits in their

interactions in the international arena. To eliminate aggression internationally, societies must also eliminate aggression internally. In order for societies to achieve peace, leaders must possess “openness, cooperativeness, and nurturance;” traits almost exclusively fostered in women who are excluded from arenas of male-dominated political decision-making (Sterba 1994). Therefore, feminist societies inclusive of women with pacific traits (whether instilled by nurture or by nature) will ultimately be more likely to reject military aggression, owing to the theoretical opposition to hierarchy and domination.

This research project does not seek to identify either the essentialist or constructivist theoretical argument as the “correct” explanation of women’s tendencies toward pacifism; that question involves a “nature vs. nurture” debate that is far beyond the scope of this analysis. Nor does this project seek to affirm the consequentialist feminist claim that women suffer disproportionately in times of war. Of greater importance to this research is the fact that each theoretical framework discussed previously leads to the same expectations about international state aggression (Caprioli 2004). In every case, the inequalities fostered between men and women at home are causally linked to greater military aggressions abroad. Whether by nature or nurture, women consistently oppose military action with greater frequency than men, as polling data from the Gulf War and the War in Iraq indicate (Gallagher 1993; Morin & Deane 2002). As such, I expect that in states where women have reached greater equality, their opinions and/or ability to influence executive decisions should reflect a greater hesitancy to initiate military aggression. In the next section, I will explain how this relationship will be measured by identifying the variables to be considered.

## Research Design

Previous studies in this area have often focused on the effect of gender equality on interstate military disputes, without discriminating between the initiating and the invaded states (Caprioli 2000; Caprioli & Boyer 2001; Regan & Paskeviciute 2003). I believe that it is more faithful to the argument at hand to define the dependent variable as “military aggression.” In a more recent study (2003), Mary Caprioli conducted a similar project, defining her dependent variable as “state aggression” measured by the first state to use force in an interstate dispute. Caprioli used military dispute data from 1978-1992, and in my research I intend to update her analysis by using the International Military Intervention data set that includes data between 1989 and 2005. Caprioli’s databases relied on the Militarized Interstate Dispute Data, combined with an original dataset to include a measure of the first state use of force, which was coded by Caprioli as a dichotomous variable, coded “1” if the state was the first to use force and “0” otherwise (2003). However, Caprioli’s personal database is inaccessible at this time, and I believe the IMI database holds certain advantages to be explained in the following section. Still, the IMI database includes “intervener” country codes that can be utilized in a similar manner to the MID set.

### Measuring Dependent Variables – Military Aggression and Type of Conflict Pursued

Past studies, such as Caprioli’s, focus mainly on the relationship between gender equality and interstate military aggression without examining the variation in types of dispute initiated; for example, humanitarian or social protectionist intervention versus intimidation or pursuit of rebel forces. Can greater gender equality not only reduce military disputes initiated, but also minimize the hostility level of those disputes? If the theoretical frameworks for this causal relationship hold true, I expect to find that those nations with greater gender equality will not only engage in military

aggression less frequently, but will also engage in a different, less hostile brand of military interaction.

While the MID database includes some measures of hostility (levels 1-5), it lacks in description of the type of conflict pursued by the aggressor. This information, provided by the IMI database, is crucial to understanding the relationship between gender equality and military aggression. I will include a measure of the type of troop activity initiated (i.e. humanitarian vs. territorial) and the numbers of both troops and casualties incurred, as an operational definition of aggression and violence. Military disputes can be coded with a dummy variable for “less aggressive” interventions: humanitarian or protectionist (1 for yes, 0 for no), as well as for each type of “more aggressive” intervention (defined as any of the following IMI variables: pursuit of rebel forces, strategic intervention, or territorial intervention), again coded 1 for “yes” and 0 for “no”. This data will allow for a unique opportunity to examine the level of hostility and military aggression initiated by gender-equal versus gender-unequal states. If women are indeed more pacific, we would expect that their equal inclusion and opportunity in society will cause those states to initiate military conflict both less frequently and in a less hostile manner – for example, for humanitarian efforts as opposed to the intent to gain territory.

These measures are subjective, having been identified by type by the creators of the IMI database. As such, it is important that this study also consider objective measures of military violence. Casualties are one such measure; the greater the hostility level, the more casualties expected as a result. This data is obtained from the variable “Total Civilian Casualties on both Sides (Killed/Wounded).” This measure is a comprehensive indicator of military aggression, as the presence of civilian casualties represents a hostile invader, targeting not only military bases and officials but average citizens as well. The measure “Amount of Troop Incursion” is also employed as an indicator of military aggression. This data, available from the IMI database, is organized categorically in the following manner:

- 0 = None
- 1 = 1 – 1000
- 2 = 1001 – 5000
- 3 = 5001 – 10,000
- 4 = 10,000+

The explanation behind the use of this variable as a measure of military aggression is that a larger, more aggressive conflict should necessarily involve a higher troop presence. The higher the number of troops sent into battle, the more violence is expected as a result.

### Measuring Independent Variables - Gender Equality

The independent variable will be defined as “gender equality,” which I plan to measure in two different ways. One important measure of gender equality is fertility rate, frequently utilized in past studies of this topic (Caprioli 2000; Caprioli 2003). In those states where women’s societal role is defined by their motherhood, it follows that they have less opportunity to enter the labor force, become politically active, or gain social independence. Therefore, fertility rate has the capability to measure women’s social equality and opportunity beyond motherhood, capturing the “interrelation among social, economic, and political access” (Caprioli 2002). Fertility has consistently been shown to correlate with women’s status, insofar as higher fertility rates go hand-in-hand with poorer health, lower education and employment rates, and lower levels of decision making (Caprioli 2002).

Fertility rate data is obtained from the World Bank and will be organized into four categories, 1-4, ordered in groups of low to high fertility rates.

- 1 = 1.1 – 1.5 average fertility rate
- 2 = 1.501 – 2.1 average fertility rate
- 3 = 2.101 – 4.7 average fertility rate
- 4 = 4.701 – 7.5 average fertility rate

After collecting fertility rate data from the World Bank and identifying rates closest in time to a nation's military conflicts given the available data, this measure was divided into four groups to best represent the data categorically. The groups were divided based on the best possible approximation to a normal distribution of data; therefore, the majority (~66%) of cases fall in categories 2 and 3, while about 34% of the cases are approximately divided between categories 1 and 4. Because most countries fall near the median range of fertility rates, with fewer nations having an extremely low or extremely high rate, these categories attempted to mirror that relationship with a near-normal distribution and subsequent categorical division. Because there is little variation in fertility rate per country over the span of this study, it is important to consider another, more flexible measure of gender equality. Percentage of women in parliament will therefore contribute to the robustness of this variable, ensuring that each state's gender equality is measured in two distinct manners.

Women with high-level decision-making powers will have greater political influence. While fertility rate provides an extensive measure of women's social and economic equality and can be attributed to female political equality as well, the added measure of percentage of women in parliament contributes to the strength of our gender equality variable by including a more robust measure of female political equality. This variable will be measured by percentage of women in parliament – data easily obtained from the Inter-Parliamentary Union statistical database. This study will measure “percentage of women in parliament” by considering only the percentage of women in the Lower or single House, as many nations do not have an Upper or second legislative body. The earliest data available for many of the countries in this data set is often between the years 1992-1994, so in cases where countries entered into conflicts previous to the data availability (for example, in 1989) the earliest percentage available is applied to those conflicts as well. Parallel to the categorization of fertility rate data, after approximating a normal distribution of data, parliament percentages were divided into categories 1-4, from highest to lowest representation. As such, a category 1 for both measures represents the highest level of gender equality. This study establishes the categories as follows:

- 1 = 18.101 – 48.8% female representation in the lower house of Parliament
- 2 = 10.901 – 18.1% female representation in the lower house of Parliament
- 3 = 5.601 – 10.9% female representation in the lower house of Parliament
- 4 = 0 – 5.6% female representation in the lower house of Parliament

Again, the categorical representation of this data proves useful when comparing the means of female representation in parliament to the five dummy variables for type of intervention.

## Data Analysis

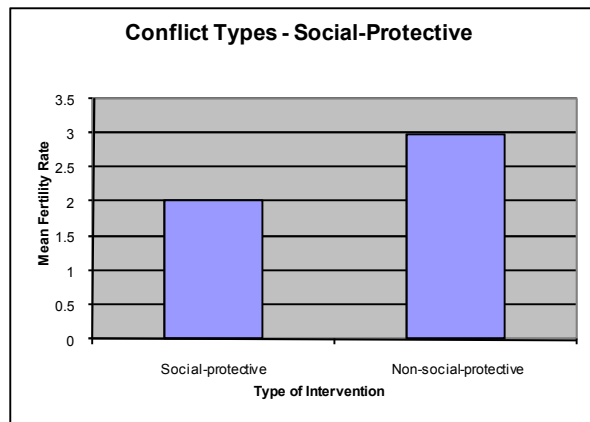
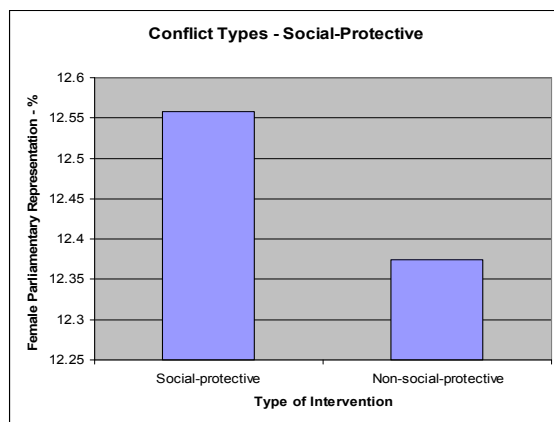
This study uses several methods to analyze the data at hand. First, to understand the relationship between types of military conflict (e.g., humanitarian vs. territorial disputes) and gender equality, the means of each equality measure (fertility rate and percentage of women in parliament) are compared against the dummy variables for each type of conflict. By this measure of analysis, the

data seems to support the hypothesis that greater gender equality leads to lesser military aggression. This study designates humanitarian and social protective conflicts as examples of “less aggressive conflict” because they involve an intervention based on the goal of peace and assistance. On the other hand, pursuit, strategic, and territorial interventions are designated as “more aggressive conflict” because the intent is based on the opposition of enemy forces or the quest for personal gain. Because this study argues that gender-equal nations are less aggressive militarily, it follows that the interventions gender-equal nations do become involved in will be less aggressive or hostile as well. In nations where governments extend equal rights and opportunities to women, including powers of decision making that allow women’s “pacifist” voices to be heard, military interventions are expected to be kept to a minimum and to be of a different nature than those of gender-unequal societies.

Secondly, this study uses descriptive statistics to analyze the relationship between gender equality and the number of both troops involved and casualties incurred in military conflicts, as a more objective measure of military aggression. I expect that greater gender equality leads to less aggressive military disputes, resulting in a less hostile interaction that involves both fewer troops and fewer casualties. In the next section, I will examine the results of the subjective hostility (type of intervention) comparing means tests, before ultimately analyzing cross tabular results for the objective measures of military aggression.

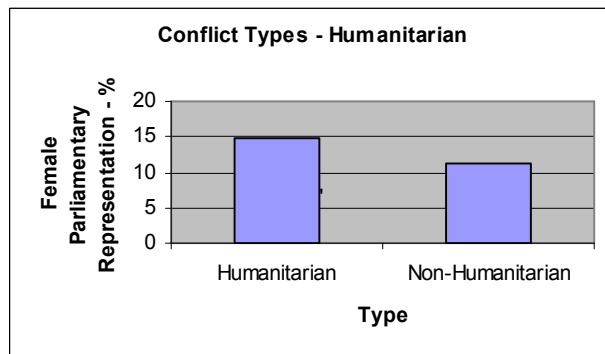
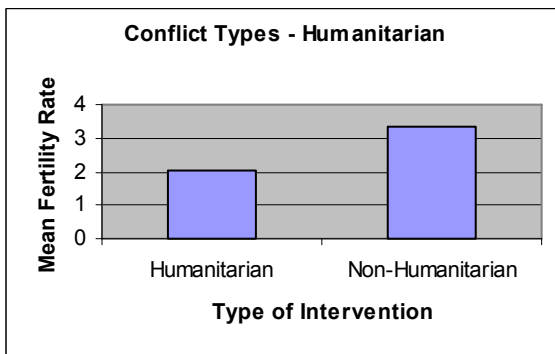
### Comparing Gender Equality to Type of Intervention

As described previously, the means of each gender measure are compared to the dummy variable (0 for no, 1 for yes) for each type of military intervention. For each type of military intervention considered, the expectation is that fertility rate should be higher in more aggressive conflicts and lower in less aggressive conflicts seems to hold true, while parliamentary representation should be higher in less aggressive conflicts and lower in more aggressive conflicts. With the possible exception of social protective interventions, the data is consistent with these expectations. The IMI database defines the goal of a social-protective intervention as “[the intent] to protect a socio-ethnic faction(s) or minority of the target country.” I initially selected this type of intervention as an example of a “less aggressive” conflict because the motives seem to fulfill the kind of maternal, caring actions expected from a more gender-equal (and therefore, pacifist) nation that reflects the attitudes of women as well as men.

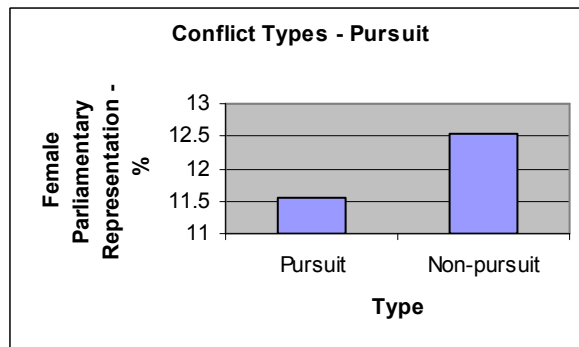
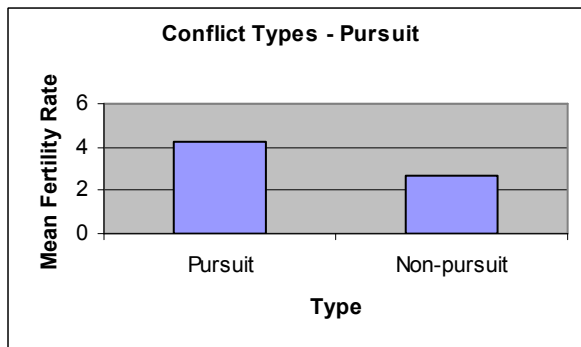


It can be said that the pattern is consistent with what is expected for a less aggressive conflict expected: fertility rate was lower (2.017) for social-protective interventions than for interventions

that were not (2.972). Similarly, percentage of females in parliament is higher (12.558) for social-protective interventions than for interventions that were not (12.374). However, the difference between protective interventions and non-protective interventions across gender equality measures is negligible. It may be the case that social-protective interventions are not an ideal model for “less aggressive” conflicts. Social-protective interventions may not involve overtly aggressive or power-hungry goals, but it may be that they do involve more violence than I expected, due to reactive aggression from the majority faction in the target country. As such, the violence involved in this type of intervention may overshadow any maternalistic or pacifist motives on behalf of the intervening nations, making this type of intervention a poor indicator of a “less aggressive” conflict. Still, the remaining types of intervention seem consistent with the hypothesis, as the following data will demonstrate.

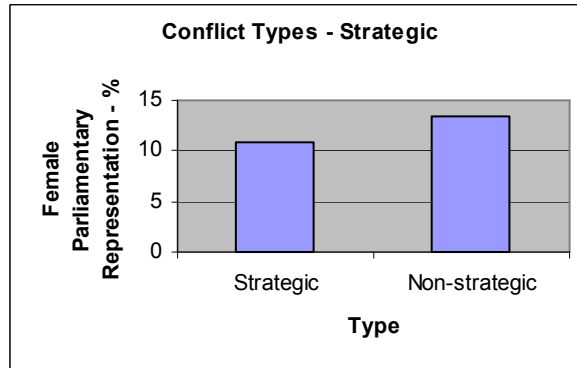
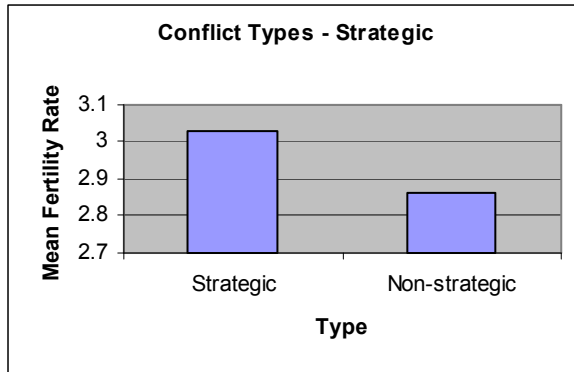


Humanitarian interventions, now the primary example of less aggressive conflicts, appear consistent with the hypothesis’ expectation about gender-equal nations. The IMI database defines humanitarian intervention’s goals as “to save lives, relieve suffering, distribute foodstuffs to prevent starvation and so forth.” The mean fertility rate for humanitarian interventions is 2.037, while the mean fertility rate for non-humanitarian interventions is 3.337, a substantial increase. Similarly, the mean parliament percentage for humanitarian interventions is 14.731%, while the mean percentage for non-humanitarian interventions is 11.178%. As expected, it seems as though those nations that become involved in humanitarian interventions have higher levels of gender equality than those that become involved in non-humanitarian conflicts. Therefore, it may not only be true that gender-equal states engage less frequently in military disputes, but also that the disputes they do become involved in are more pacifist in nature.

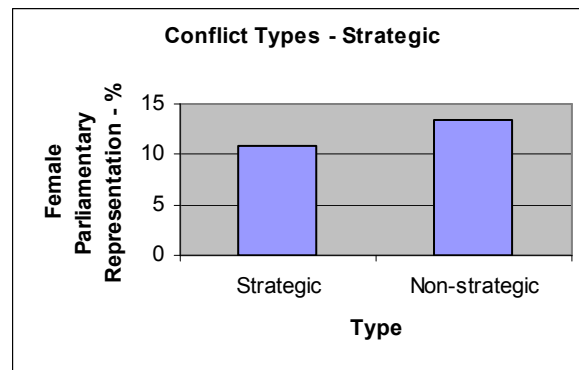
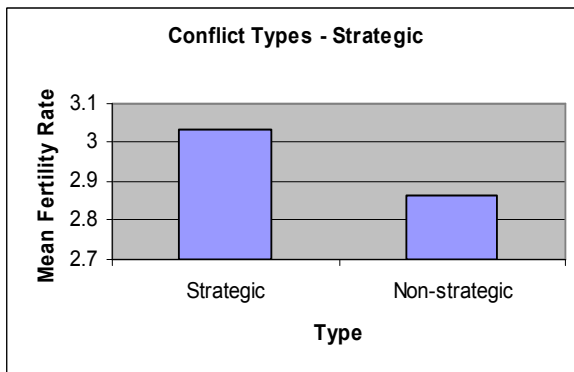


Examples of more aggressive conflicts appear consistent with the hypothesis as well. The first example, pursuit, is defined by the IMI database as conflict that “Pursue[s] Rebel or Terrorist

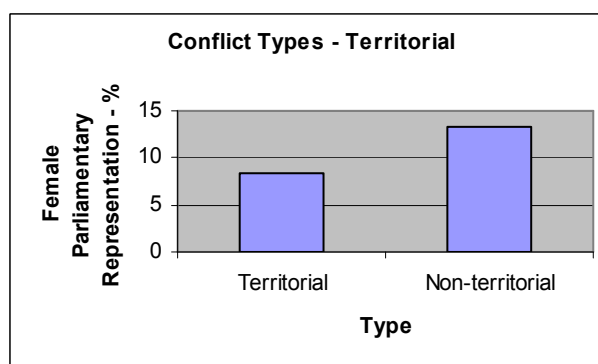
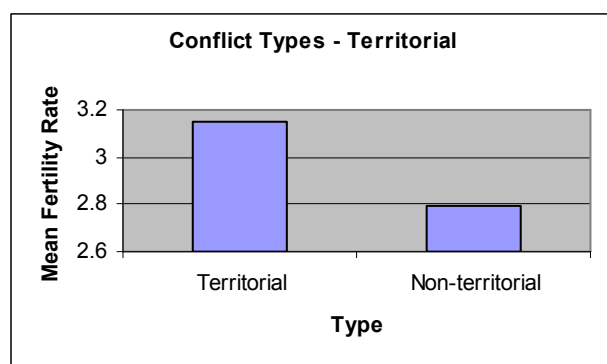
Forces across Border or into Sanctuary.” I reason that this connotes a more aggressive form of conflict, as it involves an aggressive pursuit of the enemy beyond a nation’s own boundaries. The mean fertility rate for pursuit interventions is 4.29, while the mean fertility rate for non-pursuit interventions is 2.648. The mean parliament percentage for pursuit interventions is 11.553%, while the mean parliament percentage for non-pursuit interventions is 12.524%. As



expected, it appears that the nations involved in pursuit interventions, a more aggressive form of conflict, have lower gender equality than those nations involved in non-pursuit interventions. Another form of more aggressive intervention, strategic, follows this pattern.



Strategic interventions are defined by the IMI database as “regional power balances, stability, or ideological issues mentioned by the intervener or clearly connected to the intervention.” This form of conflict is designated as “more aggressive” because it involves a conflict initiated for personal gain, whether intended to grow a nation’s power in their region or to uphold the nation’s own belief system. Though the fertility rate chart is somewhat misleading in that the difference between conflict types is rather small, the data still follows the expected relationship: mean fertility rate is higher (3.032) for strategic interventions and lower (2.862) for non-strategic interventions. Women in parliament seems to be a more significant indicator of the difference between intervention types, as the mean parliamentary percentage for strategic interventions is 10.949% as opposed to 13.392% for non-strategic interventions. Once again, it appears that nations involved in strategic interventions (a more aggressive type) are less gender-equal



The final type of “more aggressive” military conflict is territorial, defined by the IMI database as the “acquisition or retention of territory, delineation of frontiers, or specification of sovereign status.” This type is defined as more aggressive because it involves one nation aggressively seeking to benefit itself with acquired territory or the establishment of sovereignty. The mean fertility rate for territorial interventions is 3.147, while the mean fertility rate for non-territorial interventions is 2.797 – again, a smaller difference. Parliamentary percentages provide a more substantial difference though, as the mean percentage for territorial interventions is 8.453%, while the mean percentage for non-territorial interventions is 13.283%. Again it appears that the data supports the hypothesis, as those nations involved in territorial (aggressive) conflicts tend to be less gender-equal, with higher fertility rates and a lower percentage of female representation in parliament.

With the exception of social-protective interventions, which appear to be inconclusive in terms of strengthening the hypothesis (though they still follow the expected pattern, even if only by a hair), the relationship between conflict types and gender equality seems to support the idea that gender-equal nations will more likely intervene in less aggressive conflicts than in more aggressive conflicts, with the opposite being true for gender-unequal nations. In the next section, the strength of the hypothesis will be further examined, as I test the relationship between gender equality measures and troop/casualty levels.

### Descriptive Statistics – Comparing Gender Equality to Troops/Casualties Incurred

To analyze the relationship between gender equality and troops/casualties involved in military disputes, the established fertility rate and female parliamentary representation categories are utilized. As described previously, these categories were developed to estimate a normal curve representation; the majority (roughly 66%) of cases fall in the second and third categories, with the minority (roughly 34%) falling in the extremities, categories 1 and 4. Descriptive statistical crosstabs were run for each gender equality measure against each objective hostility/aggression measure (number of troops, and number of casualties to civilians), equaling four total crosstabs, provided in this study’s appendix.

The first crosstab displays the relationship between female parliamentary percentages (by category) and number of civilian casualties on both sides (invader and target countries). The statistical significance of this relationship is 0.258. In other words, there is a 25.8% chance that this relationship occurred by chance, so the null hypothesis cannot be rejected. The data fails to clearly establish that female representation in parliament directly affects the number of civilian casualties in military disputes. However, the other three crosstabs provide much more beneficial results.

The second test was run on the relationship between fertility rate and number of casualties incurred in military disputes. The significance test reveals a value that passes the 0.01 significance test, and therefore the null hypothesis that this relationship could have occurred by chance is

rejected. Therefore, the data appears consistent with the hypothesis, in that fertility rate is positively correlated with number of casualties in conflict; the higher a nation's fertility rate, the more casualties are likely to be incurred in that nation's military disputes. This finding is consistent with the theory that gender inequalities breed greater hostility and tendency toward violence; these unequal nations extend their domestic norms into the international arena and therefore have a greater propensity to violence, resulting in higher numbers of casualties during military disputes.

Two similar tests were run with another measure of military aggression, number of troops. The first, relating female parliamentary representation to number of troops resulted in a significance of 0.05 and the null hypothesis is rejected. This data appears consistent with the hypothesis. The parliamentary percentages are inversely correlated to number of troops; the higher the percentage of women in parliament, the fewer troops involved in the corresponding military dispute(s). Higher troop levels indicate a more aggressive invading country, one in which the so-called pacifist viewpoints of women are not included because they are ill-represented in parliament. This data substantiates this theory, having established a significant relationship between these measures of gender equality and military aggression.

The final test examines the relationship between fertility rate and number of troops. This crosstab also reveals a significant relationship, with a significance value of 0.012 that allows the null hypothesis to be rejected as well. As expected, fertility rate and number of troops are positively correlated; the higher a nation's fertility rate, the higher the number of troops is likely to be. High fertility rates reflect a gender-unequal society, in which dominant-aggressive and subordinating behaviors are the norm. It follows that these traits should then be reflected in international interactions, which is why the results show that higher troop numbers (an indicator of high aggressiveness) correspond with high fertility rates.

## Discussion and Conclusion

This study examined the argument that gender inequalities lead to higher levels of military aggression. Past literature has established a variety of frameworks for understanding this theory; the essentialist vs. constructivist debate attempts to pinpoint nature vs. nurture, respectively, as the cause for women's apparent propensity towards peace. These scholars argue that when women are treated as equals in society, their pacifist values will be reflected in interstate behaviors. Another sect of this research takes a "consequentialist" view, claiming that the victimization of women in times of war leads them to reject violence in the name of self-interest. Finally, another brand of scholars argues that behavioral structures are responsible for this relationship; those societies that structurally impose inequality and subordination at the domestic level will seek similar dominant behaviors internationally.

This study attempted to add to this growing body of research in several ways. First, due to limitations of the MID (Military Interstate Dispute) dataset, the most recent study on this topic (Caprioli 2003) leaves off in 1992. Using the IMI database, this study has been able to include all cross-national conflicts between the years 1989 and 2005. Secondly, past research has measured the dependent variable, military aggression, in a variety of ways: first use of force (Caprioli 2003), conflict duration (Caprioli 2000), or number of fatalities (Regan & Paskeviciute 2003). To my knowledge, none of the previous studies on this topic have used any measure that goes beyond the question of a country's likelihood of initiating conflict to further consider the type of conflict that is pursued. This study attempted to strengthen the evidence for a causal relationship between gender inequality and military aggression, using the "Type of Intervention" measure. The data is consistent with the expectation that conflicts initiated by more gender-equal states tend to be of a less

aggressive nature. This measure permits a deeper understanding of aggressive military behaviors with respect to the types of actions pursued by gender-equal vs. gender-unequal states.

Analysis of the data results shows a definite consistency with the hypothesis. When considering types of intervention, every category displayed a substantial difference between gender-equal and gender-unequal states, save for “social protection,” which displayed a negligible difference. In “peaceful” interventions (humanitarian), both fertility rates and parliamentary percentages reflected interveners that were much more gender-equal than those initiating non-humanitarian conflicts. The opposite held true for “aggressive” interventions (pursuit, strategic, and territorial), with interveners more likely to be gender-unequal, and with higher fertility rates and lower percentages of women in parliament.

In the analysis of this study’s objective measures of military aggression, number of civilian casualties and number of troops incurred, the data displayed further consistency with the hypothesis. With the exception of the relationship between parliamentary percentages and number of casualties, each tested relationship showed a high level of significance ( $<0.05$ ). The data supports the idea that greater gender equality leads to lesser military aggression. It should be noted that both tests using fertility rate as the measure for gender equality had more highly significant results (0.000 for casualties, 0.012 for troops) than those that used parliamentary percentages (0.258 for casualties, 0.050 for troops), so it can be inferred that the relationships using fertility rate as the measure for gender equality are less likely to have occurred by chance than those using percentages of women in parliament.

### Areas for Additional Research

This study has corroborated the argument that domestic gender equality reduces the aggressiveness of military conflict, and results in a greater propensity towards peaceful rather than violent interventions. Because structural domination of women is far from being the only type of inequality fostered by governments internationally, it would be interesting to examine the relationship between domestic racial equality and international state behavior as well. I would expect to find a similar pattern to the findings of this study, though accurate indicators of racial equality may not be so easy to come by; there may not be a racial equivalent of “fertility rate” as a measure that encompasses all realms of equality.

The measure of female representation in parliament was used to approximate gender equality, and this study maintains that it is a valid measure in understanding the level of equality a woman experiences in society. Higher percentages of women in parliament seem to go hand-in-hand with lower fertility rates across the data collected here. Still, it is difficult to assert that the sole position of any number of women in a legislative body gives them substantial influence on policy. Certainly, common sense leads us to believe that a higher percentage of women in parliament leads to greater influence by virtue of a louder voice, but in nations where “equality” is a standard enforced by quota and not by feminist ideals, how can we know for sure that those female legislators have a say in policy that is proportional to their numerical representation? The extent to which women in parliament directly influence the direction of policy may be difficult to measure, though tallies of votes in support or opposition to major policy decisions along with the subsequent vote result might be available in developed countries at least. Additional research that measures women’s influence on the policy process would be extremely beneficial in truly understanding international gender equality.

## Appendix

$X = \text{Parliamentary Percentages}$

$Y = \text{Number of Casualties}$

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	79.378 <sup>a</sup>	72	.258
Likelihood Ratio	77.522	72	.307
Linear-by-Linear Association	.459	1	.498
N of Valid Cases	171		

a. 96 cells (96.0%) have expected count less than 5. The minimum expected count is .15.

$X = \text{Fertility Rate}$

$Y = \text{Number of Casualties}$

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.552E2	81	.000
Likelihood Ratio	137.905	81	.000
Linear-by-Linear Association	6.662	1	.010
N of Valid Cases	193		

a. 108 cells (96.4%) have expected count less than 5. The minimum expected count is .12.

$X = \text{Parliamentary Percentages}$

$Y = \text{Number of Troops}$

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.057 <sup>a</sup>	12	.050
Likelihood Ratio	22.755	12	.030
Linear-by-Linear Association	.652	1	.419
N of Valid Cases	263		

$X = \text{Fertility Rate}$

$Y = \text{Number of Troops}$

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.670 <sup>a</sup>	12	.012
Likelihood Ratio	26.867	12	.008
Linear-by-Linear Association	1.320	1	.251
N of Valid Cases	288		

a. 5 cells (25.0%) have expected count less than 5. The minimum expected count is 1.09.

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