MEASURING THE EFFECTS OF GENDER BALANCED POLITICAL LEADERSHIP USING QUANTITATIVE INTERNATIONAL MEASUREMENTS AND INDEXES IN THE NORDIC COUNTRIES

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ABSTRACT

Do numbers tell the full story? Drawing on the theoretical frameworks of critical mass, critical actors, and descriptive versus substantive representation, this study investigates whether quantitative international indexes can meaningfully capture the effects of gender-balanced political leadership – measured across population health, income inequality, peace, and environmental impact – in the Nordic countries. Using multiple linear regression on pooled secondary data from the five Nordic countries (2006–2023/24), treated as a collective unit given their structural similarities, the study examines the relationship between female parliamentary representation (Inter-Parliamentary Union) and four outcome indices: infant mortality, income inequality (Gini Coefficient), positive peace, and ecological footprint, compared with a linear time trend. The findings suggest that representational effects are fundamentally outcome-specific. A significant negative relationship with infant mortality and a significant inverse correlation with positive peace associate women's political leadership with real consequences for population health and inclusive governance. The absence of a significant relationship with income inequality suggests that redistribution is shaped less by aggregate parliamentary presence than by women's strategic access to key fiscal roles – where Nordic women remain underrepresented despite high overall numbers. Most disruptively, increased female representation correlates with higher ecological footprints – a finding that may reflect a structural tension within the Nordic model: if women's political leadership has expanded social welfare, it may have inadvertently reinforced high-consumption economies, with environmental gains following only after a lag. The study concludes that the Nordic "gender equity aura", while grounded in real achievements, is not a completed project but a contested terrain. The numbers, on their own, tell an incomplete story: it is their critical interpretation, attentive to institutional context, temporal dynamics, and intersecting inequalities, that reveals both what gender-balanced leadership can achieve and where its limits lie.

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1. INTRODUCTION

Does gender-balanced leadership produce measurably better outcomes for societies? This question has become increasingly urgent as governments, international organizations, and civil society movements push for greater women's representation in political and institutional life. Yet the relationship between gender balance in leadership and tangible social, economic, and political outcomes remains contested in the empirical scientific literature. While advocates argue that women's political leadership brings distinct priorities and governance styles that benefit broader populations, critics caution that representation alone does not guarantee substantive change. The existing literature documents the effects of gender-balanced leadership across a range of domains, from policymaking and public health to economic growth, peace, and environmental governance, as well as the conditions that determine whether a gender-balanced political leadership translates into meaningful impact on society.

A substantial body of evidence suggests that women's political leadership positively shapes policy priorities and governance outcomes across multiple domains. Women leaders actively recruit other women and advance inclusive legislation (Dahlerup *et al*., 2005), amplify women's voices in legislatures, and improve broader political understanding (Wolak, 2020). They are consistently perceived as more effective in addressing healthcare, poverty, education, and the environment (Dolan, 2010). Women's political leadership is also consequential for climate action: female mayors in the Amazon biome have been shown to significantly reduce municipal greenhouse gas emissions (Berniell *et al*., 2025; Miranda & Espinosa, 2022). Beyond environmental governance, women's participation in peace negotiations raises the likelihood of agreements being reached, implemented, and sustained (Paffenholz, 2015), and gender-equal societies are associated with greater happiness, longevity, and economic prosperity (Audette *et al*., 2019). At the macroeconomic level, constituencies that elect women outperform those that elect men in GDP growth (Baskaran *et al*., 2018), and women's presence in research and development teams is linked to breakthrough innovations (Díaz-Garcia, 2014). Increased female representation in government also correlates with lower inequality, greater institutional trust (Helliwell *et al*., 2021), and lower COVID-19 mortality rates. Women's cabinet representation raises public health spending and life expectancy (Mavisakalyan, 2014), and a study across 48 European countries confirms that higher female political representation reduces infant mortality and increases life expectancy, even after controlling for economic development (Reeves *et al*., 2022). In Africa, women in government tend to prioritize health outcomes (Gottlieb *et al*., 2016), while research consistently finds that men are less likely to initiate legislation serving women's and children's interests (Schwindt-Bayer, 2010). The leadership style

associated with women, characterized by protectiveness, care, and empathy, further reinforces this orientation toward citizen welfare (Johnson, 2020). In developed countries, higher female representation has not significantly shifted overall public spending patterns, but has influenced specific policy choices such as public childcare and improved institutional quality by reducing corruption and rent-extraction (Zohal & Lopes da Fonseca, 2020).

However, the effect of a gender-balanced political leadership depends on parliamentarians' motivations (Karam & Lovenduski, 2010). Corruption, such as clientelism, misprocurement, abuse of power, can stifle representation (Holmberg & Rothstein, 2011). In highly corrupt contexts, more women in politics may even worsen development outcomes (Nistotskaya & Stensöta, 2018). Latin American studies found no link between descriptive representation of marginalized groups and protective legislation (Franceschet & Piscopo, 2008; Htun *et al*., 2013). Women can reinforce entrenched power or serve as "window-dressing" to appease voters or appear progressive (Nistotskaya & Stensöta, 2018; Valdini, 2019), while male elites retain control. Female representatives can emerge from corrupt networks or benefit male politicians' careers (Bjarnegård *et al.*, 2018; Valdini, 2019). Mechkova (2024) found that in highly corrupt societies, greater inclusion of women correlated with increased mortality, suggesting quotas can legitimize corrupt elites without improving outcomes. The debate centers on how, when, and under what conditions gender-balanced political leadership matters.

The Nordic countries offer the most compelling arena in which to pursue this question. Iceland, Norway, Finland, Sweden, and Denmark have for decades dominated global gender-equity rankings, including the World Economic Forum's Global Gender Gap Report and the European Institute for Gender Equality (EIGE) Index, embodying what scholars describe as a "state feminism" model in which government serves as the primary architect of gender-equitable structures, from shared parental leave to anti-discrimination legislation (Svensson & Gunnarsson, 2012). Yet the relationship between women's formal political representation and tangible governance outcomes remains empirically contested: high scores on composite indexes do not automatically translate into substantive policy change or lived equality. This paper examines what quantitative international measurements reveal about the effects of gender-balanced political leadership in the Nordic context, interrogating both the achievements these indexes document and the structural gaps they obscure.

By any quantitative measure, the Nordic record is striking. The WEF's Political Empowerment subindex, which tracks the ratio of women to men in parliamentary, ministerial, and head-of-state roles, has placed Iceland first globally for over a decade, with women holding approximately 48% of parliamentary seats and 40% of ministerial positions as of 2023 (World Economic Forum, 2023). The EIGE Gender Equality Index, spanning six domains including work, money, power, and time, confirms the regional pattern: Sweden (83.9), Finland (81.4), and Denmark (77.6) rank among the top four EU member states (European Institute for Gender Equality, 2023). The Inter-Parliamentary Union (IPU) database records the

Nordic region as sustaining the world's highest average of women in national parliaments, from 46% in Sweden to 48% in Iceland (Inter-Parliamentary Union, 2024). Yet the research literature consistently demonstrates a significant gap between these quantitative achievements and substantive policy outcomes. Paxton and Hughes (2021), drawing on pooled time-series analysis across 150 countries, find that high descriptive representation in the Nordic countries has not reliably produced transformative gender equality legislation, particularly in economic policy, a finding that directly challenges the assumption that numbers in office translate into policy change. Wängnerud (2015) corroborates this through multivariate regression of Swedish parliamentary data: as women's representation rose from 33% to 45% between 1994 and 2014, the gender gap in legislative priorities remained statistically significant once party affiliation and committee assignments were controlled for, undermining "critical mass" theory. Dahlerup (1986) identified this tension decades earlier in what she terms "the paradox of equality", formal political gains coexisting with structural inequalities in economic power, corporate leadership, and unpaid labor, a paradox the Nordic Gender Equality Policy project (2018) confirms persists today, with men still holding over 80% of private sector leadership positions and the wage gap widening significantly for mothers.

Disaggregating the data further unsettles the image of a uniform Nordic success story. Towns and Niklasson (2021), using fixed-effects regression of IPU data from 1980 to 2020, show that while Sweden and Iceland sustained growth toward near-parity, Denmark plateaued at approximately 39% after 2000, a divergence linked to institutional design, as zipper-style party-list systems produced more durable gains than candidate-centered electoral structures. The V-Dem Women's Political Empowerment Index reveals a more troubling trend: a statistically significant decline in Finland's score since 2019, attributed to rising gendered online harassment targeting women parliamentarians (Coppedge *et al*., 2024), a form of political exclusion that percentage-based indexes cannot register. Survey data from Dahlberg and Karlsson (2023) make the human cost concrete: 42% of women local politicians in Finland reported experiencing gendered political violence, compared to 12% of men. Ellingsæter (2021) adds a structural dimension, demonstrating through structural equation modeling on EIGE data that for every 10% increase in women's political representation, women's unpaid care work decreases by only 2–3%, a decoupling that exposes the limits of political leadership as a lever for domestic equality. Intersectional scholarship further sharpens this critique: Keskinen *et al*. (2019) argue that global indexes actively construct a narrative of Nordic exceptionalism that obscures the compounded disadvantages faced by racialized and immigrant women in employment, housing, and education. 'Racialized women,' here refers to women who are perceived and treated as racially distinct from the dominant ethnic majority in Nordic societies – including immigrant, non-white, and Indigenous Sami women, and who face compounded barriers to political representation and policy responsiveness as a result of the intersection of race, ethnicity, and gender (Keskinen *et al.*, 2019). The historical

pathway matters too: Dahlerup and Freidenvall (2005) demonstrate through pooled cross-national time-series data that Nordic countries achieved high representation through incremental party-led reforms rather than gender quotas, an "incremental track" producing more stable but contextually specific gains than the quota-based "fast track" adopted in Latin America and Africa, cautioning against treating Nordic index scores as universally transferable benchmarks.

What the quantitative literature ultimately reveals is not a failure of the Nordic model but a failure of measurement to keep pace with its complexity. The Nordic countries represent genuine and significant achievements in gender-balanced political leadership, but the indexes that document those achievements also flatten the contradictions within them. The gap between descriptive representation and substantive equity is not incidental; it is structural, shaped by occupational segregation, the gendered division of unpaid labor, institutional electoral design, and racial stratification that no single index fully captures. Measuring the effects of gender-balanced political leadership in the Nordic context demands more than robust international rankings, it requires methodological frameworks attentive to intra-regional variation, sensitive to what indexes cannot see, and oriented toward the conditions under which women's presence in political institutions actually translates into change.

This study employs the theoretical frameworks of critical mass and critical actors (Childs & Krook, 2008) to examine how gender-balanced political leadership shapes measurable outcomes in the Nordic Countries. Descriptive representation, the degree to which a political body mirrors its constituency's demographics, provides symbolic legitimacy and builds trust, particularly among historically marginalized communities (Pitkin, 1967). Substantive representation, by contrast, focuses on "acting for" a group by advancing its policy interests, regardless of a representative's own identity (Pitkin, 1967).

Critical Mass Theory (Dahlerup, 1988) holds that meaningful institutional change requires a threshold, often cited at 30%, of minority representatives, such as women, to effectively collaborate and influence legislative outcomes. Childs and Krook (2008, 2009) challenged this numerical focus, demonstrating that substantive representation can emerge with few representatives and that high numbers do not guarantee policy change. Their Critical Actors Theory shifts the lens to the strategic actions of committed individuals who champion marginalized groups' interests, irrespective of their own descriptive characteristics (Childs & Krook, 2008, 2009). Intersectionality (Crenshaw, 1991) further complicates the path to gender-balanced leadership in the Nordic context, highlighting that women's political experiences are shaped by overlapping identities, race, class, ethnicity, and religion, which can compound barriers to representation and must be accounted for when analyzing quantitative indices. Krook and Mackay (2010) further emphasize the role of critical actors both inside and outside institutions.

Despite the abundant research regarding women's empowerment policies (Widanti, 2023), a critical gap persists in the existing literature: the absence of quantitative frameworks capable of evaluating women's political empowerment

across diverse contexts and indicators. Scholarship on this topic has largely concentrated on developing and low-income countries, leaving high-income, gender-progressive democracies, particularly those in Northern Europe, underexplored as subjects of rigorous longitudinal inquiry. The Nordic countries, in particular, offer a uniquely uniform comparative context: Denmark, Finland, Iceland, Norway, and Sweden share consistently high GDP levels, comparable Human Development Index scores, and near-universal access to education, making them an analytically coherent cluster in which variation in women's political representation can be examined with greater precision, without the confounding effects of extreme socioeconomic disparities that complicate cross-national comparisons in global datasets.

This study addresses that gap by investigating the relationship between women's political representation and a set of composite indicators measuring population well-being, encompassing health outcomes, peace, income inequality, and environmental health, across the Nordic countries. In doing so, it contributes to the broader theoretical debate on whether the gender composition of political institutions has measurable consequences for societal outcomes, a question that remains contested in comparative politics and public policy scholarship. The study is guided by the following research question:

Can the effects of gender-balanced political leadership in the Nordic countries be meaningfully captured by international indexes, and what do those numbers actually tell us?

To the authors' knowledge, this is the first study of its kind to apply longitudinal analysis to a European context. The existing body of evidence has been built almost exclusively on data from the Global South. Quamruzzaman and Lange (2016) drew on both cross-sectional data for 51 low- and middle-income countries and longitudinal data for 20 countries between 2003 and 2011, finding that female political representation was negatively correlated with infant mortality and measles vaccination rates. Swiss, Fallon, and Burgos (2012) similarly focused on 102 developing countries between 1980 and 2005, employing a random-effects panel regression strategy and concluding that women's representation was positively associated with improvements in immunization coverage and child survival. More recently, Rustagi and Akter (2022) extended this line of inquiry using panel data instrumental-variable fixed-effects regression across 162 countries from 1990 to 2020, examining the introduction of gender quotas alongside outcomes including infant mortality, neonatal mortality, and vaccination coverage. Their findings confirmed a significant negative effect of women's political representation on neonatal and infant mortality and a positive effect on vaccination rates. Notably, the study also revealed that reserved seat quotas produced stronger gains in child health than candidate quotas, suggesting that the design of quota mechanisms matters, and that structural weaknesses in quota legislation can attenuate the positive effects of female political representation. While these contributions are substantial, their collective focus on developing-country contexts

means that the dynamics at play in consolidated, gender-progressive democracies remain poorly understood. This study takes a step toward filling that void.

2. METHOD

This study compiled data from five Nordic countries spanning the period 2006 to 2023/24 to conduct a quantitative secondary analysis. This article is part of a larger mixed-methods study that includes qualitative interviews (n=13) and two waves of survey data (n=105; n=135) with open-ended responses. However, because those findings have been or will be reported elsewhere, the present analysis focuses exclusively on secondary quantitative data from international indexes. This article not only reports the results of the secondary data, but it is also meant to provide a methodological critique of the use of these indexes to report on the results of gender balanced governance. The central aim was to determine whether a positive relationship exists between the percentage of women in parliament reported by the Inter-Parliamentary Union (IPU) and a set of well-being indices selected to measure key dimensions of long-term population well-being.

Initial consideration was given to using solely the Political Empowerment Index from the Global Gender Gap Index (GGI), as reported by the World Economic Forum (WEF). However, as Einarsdóttir (2020) cautions, the GGI should not be taken at face value; its narrow conceptualisation of gender equality fails to account for critical dimensions such as gender-based violence and local government participation. Furthermore, over the past fifty years, female heads of state have accounted for 44% of the GGI's "politics" pillar (WEF, 2019, p. 48), which can distort country-level scores. In Iceland, women's parliamentary representation declined from 48% in 2016 to 38% in 2017 (Inter-Parliamentary Union, 2018), yet this deterioration was not reflected in the GGI. Analogous masking effects, wherein a country records a high GGI score despite a persistently moderate share of women in parliament, were also observed in Chile.

In response to these limitations, it was determined that a linear regression analysis of secondary data would be more appropriate. This involved comparing the IPU-reported percentage of women in parliament with the following well-being indices: the Ecological Footprint per person (Global Footprint Network), the United Nations Infant Mortality Index, the Positive Peace Index, and the UN Inequality-Adjusted Human Development Index.

It is worth noting that Joshi and Goehrung (2018) developed a women's political leadership index that measures collective representation across the judicial, executive, and legislative branches and was applied to 21 Asian territories; however, this index has not yet been extended to Nordic European countries. The study drew on data from the Inter-Parliamentary Union (IPU) on the percentage of women in the lower house of parliament, covering the period 2006 to 2023. In the regression models, the Political Empowerment Index and the percentage of women in parliament served as the independent variables (x), while the remaining indices

constituted the dependent variables (Y). These indices were selected on the basis of data availability across countries and over the study period, as well as their capacity to quantitatively represent key dimensions of population well-being and the existential threats facing humanity, namely war, health, extreme inequality, and environmental sustainability. The indices employed were the United Nations Infant Mortality Index, the Gini Coefficient, Positive Peace Index, and the Ecological Footprint per person.

The UN Infant Mortality Index records the number of deaths of infants under one year of age per 1,000 live births within a given geographical area in a given year, and serves as a proxy indicator of healthcare quality and the adequacy of societal support structures for women.

The Gini Coefficient is a widely used measure of income inequality, expressed on a scale from 0 to 1, where values closer to 1 indicate greater inequality.

The Positive Peace Index measures national societal resilience by evaluating the attitudes, institutions, and structures that underpin peaceful societies, which in turn are associated with thriving economies, stronger ecological performance, and greater adaptability to change. Scores range from 1 to 5, where lower values indicate higher levels of Positive Peace.

The Ecological Footprint per person, produced by the Global Footprint Network in collaboration with York University, quantifies human demand on natural capital, the quantity of nature required to sustain human populations and their economies, expressed in global hectares (gha).

2.1. DATA ANALYSIS

For the Iceland-specific analysis, the Political Empowerment sub-index served as the independent variable (x) in a linear regression on data from 2013 to 2023, with the Positive Peace Index, the United Nations Infant Mortality Index, the Gini Coefficient, and the Ecological Footprint per person as dependent variables (Y). These indices were chosen for their data availability over the study period and their capacity to represent the principal domains of global threat identified in Chapter One: war, health, inequality, and environmental and climate-related disasters.

These limitations of the GGI, discussed above, informed the decision to substitute the Political Empowerment Index with the IPU's percentage of women in parliament as the independent variable in the Nordic-countries analysis.

In response to these limitations, a multiple linear regression analysis of secondary data was conducted, incorporating two explanatory variables: time (in years) and the percentage of women in parliament as reported by the IPU. The analysis examined the effects of these variables on the selected well-being indices across the five Nordic countries (Iceland, Denmark, Sweden, Norway, and Finland). These countries were selected for their broadly comparable levels of female parliamentary representation and social policy frameworks; pooling their

data also helped mitigate the statistical constraints associated with analysing a single country over a limited time series. The dependent well-being indices included the Ecological Footprint per person (Global Footprint Network), the United Nations Infant Mortality Index, the Positive Peace Index, and the Gini Coefficient. Following the regression analysis, the researcher examined the residual plot in the output to check whether the model's assumptions were met (constant variance and normality).

2.2. LIMITATIONS

A primary limitation of this study is that single-country regression analysis is constrained by a relatively small dataset, which may affect the reliability of the results. To address this, and given the broad structural similarities among the Nordic countries, the five nations were treated as a collective unit, thereby expanding the dataset to cover an average span of approximately 18 years. Ideally, a more robust analysis would draw on a longitudinal dataset spanning at least 30 years. A further challenge lies in identifying indices that can adequately capture complex phenomena such as environmental threats, health outcomes, inequality, and peace. Many countries present highly specific contextual circumstances that may not be fully reflected in standardized indices. Additionally, several of these indices are themselves products of multiple interacting variables and may be substantially shaped by GDP, given that many of the frameworks underpinning them, including those of the World Economic Forum and the World Bank, are embedded in a broadly Western neoliberal paradigm.

3. RESULTS

The secondary data was analyzed through multiple linear regression analysis through Stapplet by comparing each of the Well Being Indexes with the two explanatory variables time (Years) and Inter-Parliamentary Union % of Women in the Parliament separately considering data from 2006/12 depending on the available data for the y variables to 2023/24.

Linear regression analysis of secondary data by comparing each of the selected Well Being Indexes, the Positive Peace Index, the United Nations Infant Mortality Index, the Gini Coefficient, and the Ecological Footprint per person with the IPU % of women in the parliament in the Nordic Countries produced nuanced results that are only partially in line with the original results through quantitative and qualitative analysis of both surveys and the interviews.

Table 1 represents the multiple linear regression analysis between Time (Year) and the IPU % of Women in the Parliament in the Nordic Countries (independent variable) as independent variables and the Infant Mortality Index (dependent variable). The hypothesis here was that:

H1: There is a significant negative relationship between the IPU % of Women in the Parliament in the Nordic Countries and the UN Infant Mortality Index.

UN Infant Mortality Rate = 81.720776 + -0.038122(Year) + -0.058858 (IPU % of Women in parliament) S=0.736 $R^2 = 0.219$ R^2 (adj.) = 0.202

Table 1

Multiple Regression Analysis of UN Infant Mortality Rate in the Nordic Countries (2006–2025)

Model Component	**Results**			**Statistical Significance**	**Interpretation**
Dependent Variable	UN Infant Mortality Rate				Deaths per 1,000 live births. Lower rate means better child/ and mother's health.
Time Frame	2006–2025 (20 years)				
Core Predictor	% women in parliament				
Predictor	Coefficient(b)	St. Error	t-value	p-value	Interpretation
Constant	81.721			p = 0.007	Not meaningful to analysis
Year	-0.038	0.015	-2.562	p = 0.012	This association is statistically significant. On average, infant mortality declined by 0.038 units per year, highlighting substantial global advancements in child health outcomes during the study period.
% women in parliament	-0.059	0.023	-2.573	p = 0.012	Statistically significant. A 1% increase in women's representation is associated with a 0.059 unit decrease in mortality. Supports hypothesis.
Model Fit					
R-squared	0.219				Model explains 21.9% of variance in mortality rates.
R-squared value adjusted	0.202				
Overall F-test= p-value	F(2, 97) = 13.565, p < 0.001				The overall regression model is statistically significant.
Key Note	*Between 2006 and 2025, increased female representation demonstrates a significant correlation with reduced infant mortality rates, even when controlling for a pronounced independent temporal trend of improvement.*				

Table 1 presents the results of the multiple linear regression for infant mortality. The negative coefficient for women's parliamentary representation (-0.059, p = 0.012) indicates that, after controlling for the general downward trend in infant mortality over time, higher female representation is associated with lower infant mortality. Specifically, a one-percentage-point increase corresponds to a predicted decrease of approximately 0.059 infant deaths per 1,000 live births.

Next, the researcher examined the residual plot in the output to check whether the model's assumptions were met (constant variance and normality).

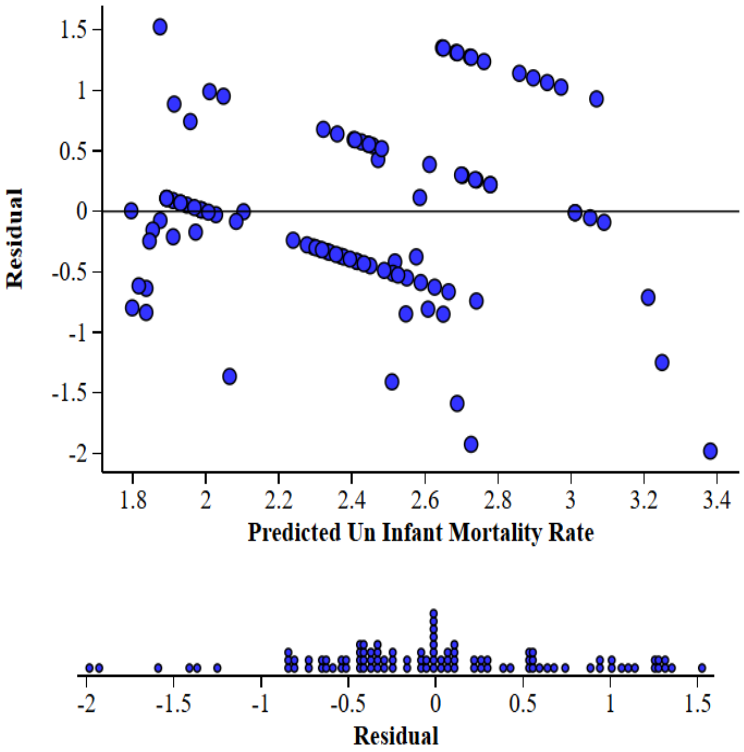

Figure 1. Residual plot for the predicted UN Infant Mortality Rate in the Nordic Countries.

In a well-fitted regression model, residuals (the differences between observed and predicted values) should be scattered randomly around the zero line, with no obvious pattern. Here, the points are dispersed without curvature, clusters, or a funnel shape. This random distribution indicates that the model's assumptions of linearity (the relationship between variables is straight-line) and homoscedasticity (the spread of errors is roughly constant across all predicted values) are reasonably satisfied. In practical terms, this means the model is appropriately specified, and its statistical significance tests can be trusted.

The residual plot shows a random distribution of points with no discernible patterns, such as curvature or heteroscedasticity. This observation suggests that the assumptions of linearity and homoscedasticity underlying the model are reasonably satisfied, thereby supporting the validity of the statistical tests applied.

There are approximately two to three potential outliers, with residuals approaching ±1.5. While these data points warrant consideration, the overall random distribution of residuals and the substantial sample size (n = 100) suggest that these outliers are unlikely to meaningfully bias the study's conclusions.

The estimated coefficient for the Inter-Parliamentary Union (IPU) percentage of women in parliament is -0.059 (p = 0.012), indicating that, after adjusting for temporal effects, each one-percentage-point increase in women's parliamentary representation is associated with a predicted decrease of 0.059 infant deaths per 1,000 live births. This result provides robust statistical evidence to reject the null hypothesis.

Table 2 represents the multiple regression analysis between Time (Years) and the IPU % of Women in the parliament (independent variable) and the Gini Coefficient (dependent variable) from 2006–2025. The hypothesis here was that:

H2: There is a significant negative relationship between WPEI on the Gini Coefficient.

Gini Coefficient = -80.972578 + 0.054262(Year) + -0.017287 (IPU % Women in parliament) $S = 1.362$ $R^2 = 0.043$ R^2 (adj.) = 0.023.

Table 2

Multiple Regression Analysis of Gini Coefficient in the Nordic Countries (2006–2025)

Predictor	**Coefficient(b)**	**St. Error**	**t-value**	**p-value**	**Interpretation**
Constant	-80.97			p = 0.141	Not statistically significant or meaningful.
Year	0.054	0.028	1.97	p = 0.052	The result is of borderline statistical significance, indicating a potential upward trajectory in inequality over time (estimated at approximately 0.054 units per year); however, the strength of this inference is limited, as the associated p-value is near the conventional threshold for significance ($p \approx 0.05$).
% women in parliament	-0.017	0.042	-0.408	p = 0.684	The result does not provide evidence that women's representation has a measurable linear effect on income inequality in this context. The effect is extremely weak relative to its standard error (noise to signal).
Model Fit					

Table 2 (continued)

Predictor	Coefficient(b)	St. Error	t-value	p-value	Interpretation
R-squared value	0.043				The model explains only 4.3% of the variance in Gini scores. The model has very low explanatory power.
Overall F-test= p-value	F(2, 97) = 2.189, p = 0.118				The overall regression model is not statistically significant ($p > 0.05$). The predictors do not reliably explain variation in Gini.
Key Note	*No significant relationship found. Over 2006–2025, the data do not support the hypothesis that female parliamentary representation is a linear predictor of income inequality (Gini) in the Nordic Countries. The model itself has major validity issues.*				

Table 2 presents the regression results for income inequality (Gini Coefficient). The model is not statistically significant ($p = 0.118$), and the coefficient for women's parliamentary representation (-0.017) is not distinguishable from zero ($p = 0.684$). This null finding suggests that aggregate female parliamentary representation does not have a detectable linear association with income inequality in the Nordic context.

Next, the researcher examined the residual plot in the output to check whether the model's assumptions were met (constant variance and normality).

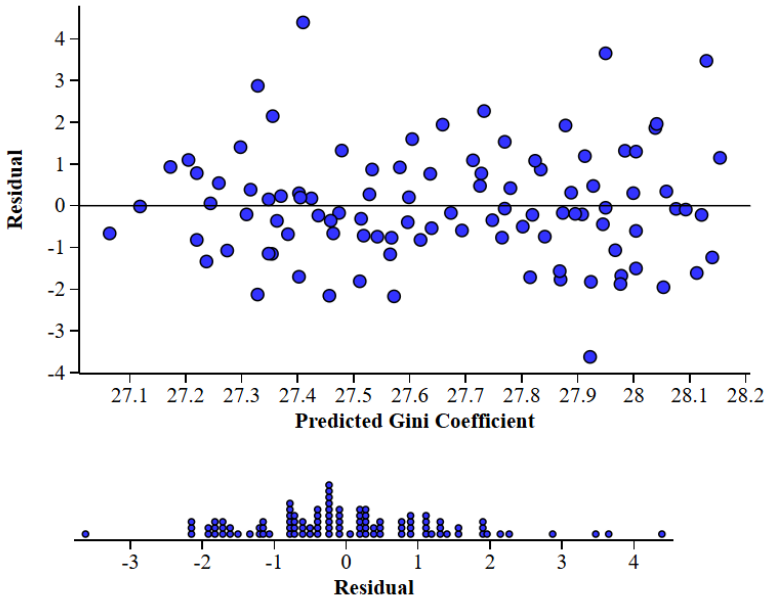

Figure 2. Residual plot for the predicted Gini Coefficient in Nordic Countries.

Unlike Figure 1, this plot shows a clear funnel or cone shape: the residuals are clustered near zero for lower predicted values but spread out widely for higher predicted values. This pattern is called heteroscedasticity (non-constant variance). When this occurs, the model's statistical tests (p-values and confidence intervals) may be unreliable. In practical terms, this means the null findings for income inequality should be interpreted with caution, and a different type of model might be more appropriate for analyzing inequality data.

Residuals show a funnel shape (heteroscedasticity), violating a key model assumption. This undermines the reliability of the p-values and suggests a linear model may be inappropriate.

The analysis reveals that, after adjusting for temporal effects, an increased proportion of women in parliamentary positions does not exhibit a statistically significant association with changes in the Gini Coefficient – a standardized metric of income inequality – in Nordic countries during the period 2006–2025.

The result of the multiple regression analysis for the independent variable Time approaches the threshold for statistical significance, suggesting a potential upward trajectory in income inequality over time (estimated at approximately 0.054 units per year), a pattern substantiated by the secondary data. The negative coefficient estimate (−0.017) for the percentage of women in parliament nominally indicates a potential association with reduced income inequality (i.e., a lower Gini Coefficient); however, the magnitude of this effect is trivial and statistically indistinguishable from zero. The associated p-value (0.684) substantially exceeds the conventional significance threshold ($p < 0.05$). Accordingly, the null hypothesis cannot be rejected, and there is no statistically significant evidence to support the existence of a linear relationship between female parliamentary representation and income inequality in this context.

Table 3 below represents the multiple linear regression analysis between Time and the Women's Political Empowerment Index (independent variable) in the Nordic Countries as independent variables and the Positive Peace Index (dependent variable). The hypothesis here was that:

H3: There is a significant negative relationship between the IPU percent of women in the parliament on the Positive Peace Index.

Positive Peace Index = -23.726407 + 0.01288 (Year) + -0.016784 (% of women in the parliament) $S = 0.116$ $R^2 = 0.217$ R^2 (adj.) = 0.196.

Table 3 presents the regression results for the Positive Peace Index (PPI), where lower scores indicate greater peace. The negative coefficient for women's parliamentary representation (-0.017, $p < 0.001$) indicates that higher female representation is associated with greater peace. The R-squared value of 0.217 means that the two predictors explain approximately 22% of the variation in PPI scores.

Table 3

Multiple Regression Analysis of Positive Peace Index in the Nordic Countries (2009–2024)

Predictor	**Coefficient(b)**	**St. Error**	**t-value**	**p-value**	**Interpretation**
Constant	-23.726	6.280	-3.78	< 0.001	Baseline term (not directly interpretable)
Year	+0.013	0.003	4.08	< 0.001	**Time Trend**: Holding representation constant, the PPI score increased slightly over time (a trend associated with less peace).
% women in parliament	-0.017	0.004	-3.75	< 0.001	**Main Effect**: Holding time constant, higher female representation decreased the PPI score (associated with more peace). Supports hypothesis
Model Fit	**Value**				**Interpretation**
R-squared value adjusted	0.196				The model (Year + % Women) explains **19.7%** of the variance in PPI scores.
Overall F-test= p-value	< 0.001				The overall regression model is statistically significant
Key Note	*The Positive Peace Index (PPI) is scaled such that a lower score indicates higher societal peace/resilience. Therefore, a negative coefficient is associated with an increase in peace.*				

The model's R-squared of 0.217 means that 21.7% of the total variation in the Positive Peace Index scores across all Nordic country-year observations from 2009 to 2024 is explained by the joint, linear influence of the two predictors: Year and % of Women in Parliament. In complex social phenomena (such as national peace levels), single-digit R-squared values are common. An R-squared of 21.7% for just two variables is considered a moderate-to-strong explanatory power. In fact, the fact that 78.3% of the variation is unexplained is expected and realistic. The Positive Peace Index is influenced by dozens of factors (economic shocks, specific policies, global events, cultural shifts, etc.). The model isolates and quantifies the significant, unique contributions of two key structural/political variables.

The Year variable has a positive coefficient (0.013) and is also highly significant ($p < 0.001$). This confirms that, on average, the Positive Peace Index in Scandinavia has been increasing by about 0.013 units per year from 2009 to 2024, independent of changes in parliamentary representation. This suggests that, independent of women's representation, the measured PPI score got slightly worse over time (or other factors not in the model caused the score to rise). The simple

correlation (r = -0.217) was the net result of these combined forces. By isolating them, the multiple regressions show that the specific negative relationship is real and significant.

Holding the year constant, for every 1-percentage-point increase in women's parliamentary representation, the Positive Peace Index is predicted to decrease by 0.017 units, on average. The p-value (<0.001) is highly significant, providing robust evidence against the null hypothesis (of no relationship).

Next, the researcher examined the residual plot in the output to check whether the model's assumptions were met (constant variance and normality).

Figure 3 represents the residual plot for the predicted Positive Peace Index in the Nordic Countries.

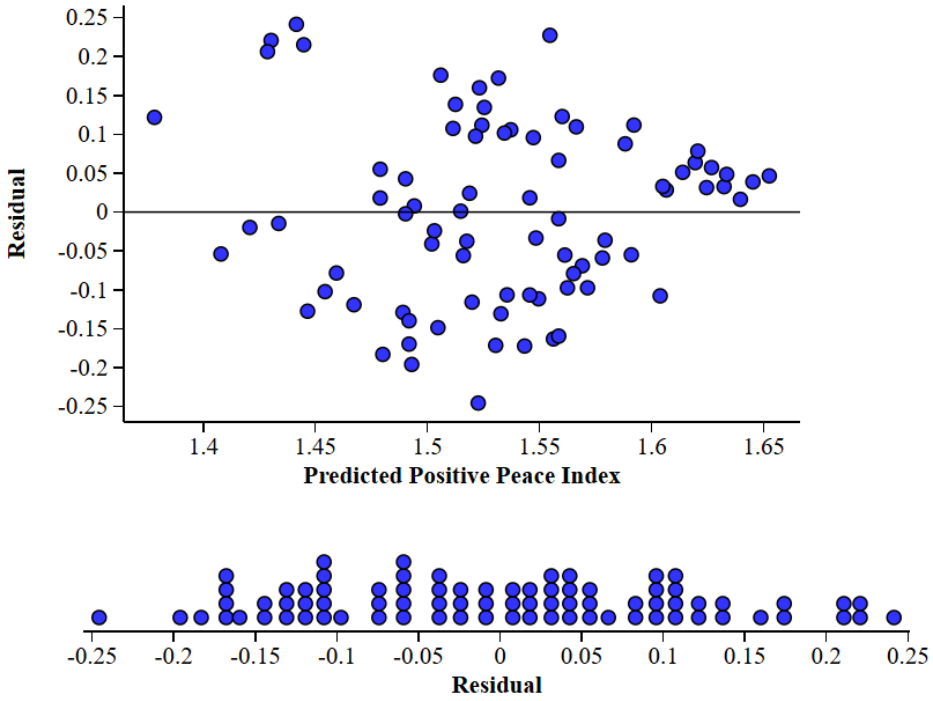

Figure 3. Residual plot for the predicted Positive Peace Index in the Nordic Countries.

The points are scattered randomly around the zero line, with no obvious curvature, funneling, or clustering. All residuals fall within a narrow band (approximately –0.2 to +0.2), indicating consistent prediction accuracy across all values. This random distribution confirms that the assumptions of linearity and homoscedasticity are satisfied. In practical terms, this means the statistical

conclusions about the relationship between women's parliamentary representation and positive peace are valid and trustworthy.

The residual plot shows that points are randomly dispersed across the horizontal band, with no obvious curves, funnels, or trends, indicating that the linearity and homoscedasticity (constant variance) assumptions are satisfied.

The vertical spread of the residuals is roughly consistent from left to right, suggesting that the model's error does not change across different predicted values. Additionally, the residual points appear to be centered around the zero line, indicating that the model's predictions are unbiased on average and that all residuals fall within a reasonable range (approx. -0.2 to +0.2). Finally, no glaring outliers are dramatically isolated, indicating that no data points exerted undue influence on the results.

Using multiple regression analysis, controlling for time (Year), helped clarify and strengthen the evidence for the negative relationship. The residual plot confirmed that the model's assumptions are met, validating the statistical conclusions.

A higher percentage of women in parliament is associated with a statistically significant increase in Positive Peace (i.e., a lower index score) in Nordic countries from 2009–2024, after accounting for the general trend of time. At the same time, independently, Positive Peace in the region has been significantly improving year over year throughout this period.

Table 4 represents the multiple regression analysis between Time (Years) and the IPU % of women in parliament (independent variables) and the Ecological Footprint per Person (dependent variable) in Nordic Countries from 2006 to 2024. For this variable Icelandic data were not available. The hypothesis here was that:

H4: There is a significant negative relationship between IPU percent of women in parliament on the Ecological Footprint per person.

Ecological Footprint per person = 311.897331 + -0.156108 (Year) + 2.94281 (IPU % Women in parliament) $S = 1.362$ $R^2 = 0.136$ R^2 (adj.) = 0.113.

Table 4 presents the regression results for Ecological Footprint per capita. The positive coefficient for women's parliamentary representation (+0.264, $p = 0.004$) indicates that, after controlling for the general downward trend over time, higher female representation is associated with a larger per capita ecological footprint. This finding contradicts the initial hypothesis and is discussed in Section 4.

Next, the researcher examined the residual plot in the output to check whether the model's assumptions were met (constant variance and normality).

Table 4

Multiple Regression Analysis of the Ecological Footprint per Person in the Nordic Countries (2006–2024)

Predictor	Coefficient(b)	St. Error	t-value	p-value	Interpretation
Constant	311.897	108.711	2.869	0.05	Baseline term (not directly interpretable)
Year	-0.156	0.055	-2.85	p = 0.006	Highly statistically significant negative trend was observed, with the Ecological Footprint exhibiting an independent decline of approximately 0.156 gha per year over the study period. This finding is indicative of improving environmental efficiency.
% women in parliament	+0.264	0.09	2.94	p = 0.004	The results are highly statistically significant and indicate a positive association. Specifically, a one-percentage-point increase in women's parliamentary representation corresponds to an estimated 0.264 global hectares (gha) increase in Ecological Footprint. This positive relationship, which runs counter to the original hypothesis, suggests heightened environmental demand associated with greater female political participation. Furthermore, a strong signal-to-noise ratio lends additional robustness to these findings.
Model Fit					
R-squared value	0.136				The model accounts for 13.6% of the variance in Ecological Footprint scores. While this degree of explanatory power is relatively modest, it is not atypical for models utilizing ecological-economic data, given the inherent complexity and multifactorial nature of such systems.
Overall F-test= p-value	F(2,73) = 5.77, p = 0.005				The overall model attains statistical significance, reinforcing the validity of the observed associations between the independent variables and Ecological Footprint.
Key Note	*The analysis reveals a significant positive linear relationship for an increase of women in the parliament, contradicting the hypothesis. In the Nordic Countries (2006–2024), higher female representation is associated with a higher per capita ecological footprint, after accounting for a general trend of footprint reduction over time.*				

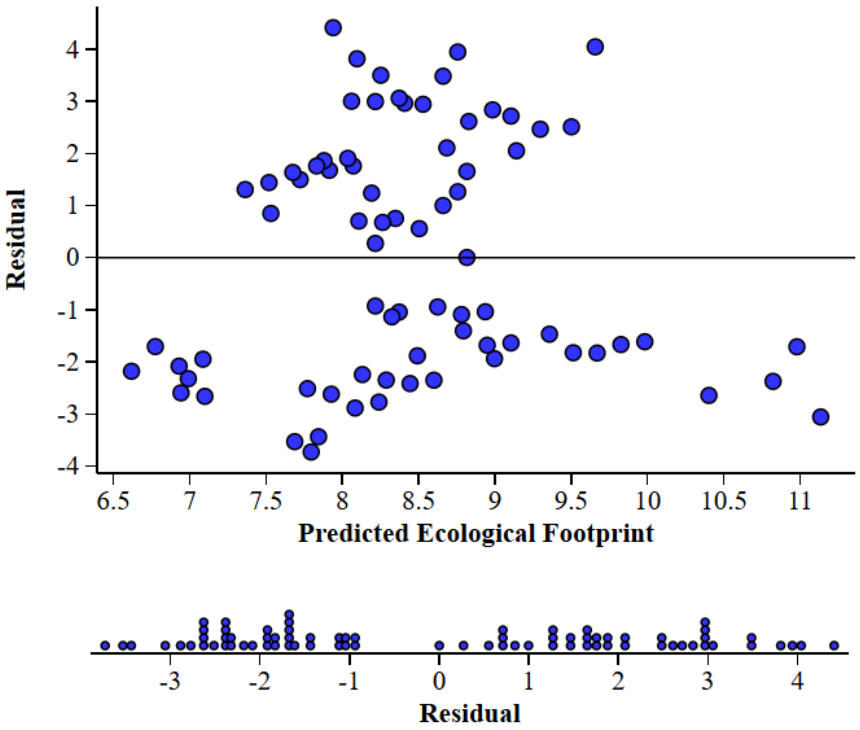

Figure 4. Residual plot for the predicted Ecological Footprint per person in the Nordic Countries.

The points are broadly scattered around the zero line, with no dramatic curvature or strong funneling. While minor deviations are present (a few points on the left side show a slightly wider spread), the overall pattern is sufficiently random to satisfy the assumptions of linearity and homoscedasticity. In practical terms, this means the model's finding, that higher women's parliamentary representation is associated with a larger ecological footprint, can be considered statistically reliable, though some caution is warranted given the minor deviations.

The residual analysis demonstrates a largely random distribution with constant variance, supporting the fulfillment of key linearity and homoscedasticity assumptions. Although minor deviations are present, the principal statistical assumptions underlying the model are sufficiently met, thereby validating the inferential tests conducted.

However, the relationship between the IPU percent of women in the parliament was in contradiction of the hypothesis. The analysis demonstrates a statistically significant positive linear association, which diverges from the initial hypothesis. Specifically, in the context of Nordic Countries between 2006 and 2024, increased female representation in parliament is correlated with higher per

capita Ecological Footprint values, even after controlling for the overarching temporal trend of declining ecological impact.

4. DISCUSSION

This study set out to examine whether the effects of gender-balanced political leadership in the Nordic Countries can be meaningfully captured by quantitative international indexes, and, more fundamentally, what those measurements actually reveal about the societies they purport to describe. The findings yield a complex portrait: one that affirms the achievements documented in global rankings while exposing their conceptual and methodological limitations. The results suggest that the relationship between women's parliamentary representation and societal outcomes is neither uniform nor linear, but varies systematically across outcome domains, institutional contexts, and temporal horizons. As with all observational studies using secondary aggregate data, it is not possible to establish causal relationships. The associations reported here may reflect unobserved confounding variables, reverse causality, or the effects of broader societal trends that correlate with both women's representation and the outcome variables.

The statistically significant negative relationship between the percentage of women in parliament and infant mortality aligns with a well-established body of cross-national evidence (Mavisakalyan, 2014; Quamruzzaman & Lange, 2016; Rustagi & Akter, 2022) and extends it to the Nordic context. This finding suggests that even within a region already characterized by robust welfare states and low baseline mortality, variation in women's political representation remains a meaningful predictor of population health outcomes. Its consistency across multiple model specifications suggests the relationship is not merely an artifact of broader socioeconomic development – a concern that has long plagued cross-sectional studies using global datasets. In the Nordic context, where GDP per capita and human development indicators are uniformly high, detecting a significant health effect strengthens the case for a genuinely political mechanism, rather than a spurious correlation driven by economic development.

The absence of a statistically significant linear relationship between female parliamentary representation and income inequality (measured by the Gini Coefficient) is, on its face, a null finding – yet it is a theoretically instructive one. The result suggests that mechanisms linking descriptive representation to redistributive outcomes differ fundamentally from those linking representation to health or peace outcomes. One plausible interpretation, grounded in the critical actors' framework (Childs & Krook, 2008, 2009), is that income inequality is shaped less by the aggregate percentage of women in parliament than by their strategic presence in key fiscal roles, ministerial portfolios, budget committees, and finance ministries, where Nordic women remain underrepresented despite high overall parliamentary numbers. This is consistent with the persistent gender pay gap (13% across the

Nordic region in 2023) and occupational segregation documented by the Nordic Gender Equality Policy project (2018). Methodologically, the finding exposes a core limitation of parliamentary percentages: they aggregate across positions of unequal power, rendering invisible the divergences in women's access to economic policymaking that may be most consequential for inequality outcomes.

The stability of the Gini Coefficient over the study period, particularly in Iceland, where it remained narrowly within the range of 22 to 26 between 2006 and 2025, suggests another layer of interpretation. This stability may reflect not women's political leadership but the structural logic of the Nordic welfare state itself: social assistance mechanisms that operate as automatic stabilizers, decoupling inequality outcomes from year-to-year political variation. When welfare institutions already embed redistributive principles, the marginal contribution of additional women parliamentarians is necessarily diminished. These point to a broader methodological challenge: the effects of gender-balanced leadership may be most detectable where women's representation is a new phenomenon disrupting established policy regimes, whereas in contexts of sustained high representation, those effects risk being absorbed into institutional baselines and rendered statistically invisible.

Additionally, interpreting the inequality findings solely through the lens of gender pay gaps and occupational segregation risks reproduces the very limitations that intersectional scholarship has identified in mainstream gender equality research. As Keskinen, Tuori, and Mulinari (2019) argue, in "Complying with Colonialism", the Nordic "gender equity aura" is itself a racialized construct – one that positions Nordic nations as progressive in contrast to immigrant and non-Western communities. The Gini Coefficient aggregates across populations without distinguishing between native-born and immigrant women, between majority and Indigenous Sámi populations, or between racialized and non-racialized citizens. Empirical studies on employment, housing discrimination, and educational outcomes consistently show that women of immigrant background face compounded disadvantages that aggregate measures like the Gini obscure (Keskinen *et al*., 2019). The absence of a significant relationship between women's representation and income inequality may therefore reflect not the absence of an effect, but the inadequacy of aggregate measures to capture stratified inequality. Women's political leadership may reduce inequality, but for which women? The intersectional lens suggests that benefits may accrue unevenly, with racialized and immigrant women experiencing considerably fewer gains, pointing to a critical gap in the indices this study employs.

The stability of the Gini Coefficient may also reflect what Keskinen *et al*. (2019) term "Nordic exceptionalism", a self-congratulatory narrative that obscures persistent racial and ethnic stratification. The absence of a detectable effect on aggregate inequality may indicate that the policy agendas of women parliamentarians, shaped by predominantly white feminist movements, have not sufficiently addressed the barriers faced by racialized and immigrant women. The null finding is thus not

merely a methodological artifact but a substantive revelation: the link between descriptive representation and redistributive outcomes is mediated by whose interest representatives actually advance. A parliament composed of women from dominant racial and class backgrounds may not produce the same inequality-reducing effects as one reflecting the full intersectional diversity of the population, a commentary on the limitations of gender-balance measures that account only to gender. The intersectional lens suggests that benefits may accrue unevenly, with racialized and immigrant women experiencing considerably fewer gains than native-born women. However, the indices employed in this study, including the Gini Coefficient and parliamentary percentages, do not permit disaggregation by race, ethnicity, or migration status. We therefore acknowledge this as a critical gap: our findings describe aggregate effects, but intersectional analysis would require different data and methods.

The significant inverse correlation between women's parliamentary representation and Positive Peace Index scores (indicating more peaceful societies) reinforces the theoretical link between descriptive representation and inclusive governance. This is consistent with the argument that women's political leadership contributes not only to policy content but to the process of governance itself: rendering it more collaborative, less conflictual, and more attentive to social welfare (Bratton & Ray, 2002; Paffenholz, 2015; Audette *et al*., 2019). The result also speaks to the debate between critical mass and critical actors' theories (Dahlerup, 1988; Childs & Krook, 2008). The Nordic data suggest that sustained high representation may generate the institutional conditions within which critical actors can operate effectively, not a refutation of critical actors' theory, but a refinement of it: critical actors require enabling environments that quota-driven contexts with more recent representation gains may not yet provide.

The unexpected finding, that increased female parliamentary representation is correlated with higher per capita Ecological Footprint values, even after controlling for the overall temporal trend of declining ecological impact, represents the study's most theoretically disruptive result. On its surface, it appears to contradict the prevailing narrative that women's political leadership is uniformly associated with progressive outcomes. Yet, critically interpreted, this finding may reveal something more fundamental: the temporal dynamics of political representation and policy change do not unfold along a single, uniform trajectory.

Three interlocking interpretations merit consideration. First, drawing on critical actors' theory (Childs & Krook, 2008, 2009), women parliamentarians, particularly in early phases of increased representation, may prioritize social welfare objectives (health, education, family policy) over environmental regulation. These priorities are consistent with the health and peace findings documented here, yet may entail near-term ecological costs. The environmental effects of women's political leadership may thus follow a distinct temporal trajectory, with social gains appearing first and environmental gains emerging only after a lag, as women

move into environmental portfolios and welfare gains create political space for sustainability agendas.

Second, the finding may reflect a measurement problem embedded in the indices themselves. Parliamentary percentages capture descriptive representation only, not women's access to environmental policymaking roles or committee assignments. As the United Nations Framework Convention on Climate Change (2022) reports, women occupied only 33% of leadership positions in climate negotiations between 2019 and 2021, despite gender parity policies adopted in 2014, a pattern likely mirrored in Nordic environmental governance. If women are systematically underrepresented in environmental committees and ministries, the absence of a negative correlation with ecological impact becomes readily explicable. Parliamentary percentages conflate presence in the legislature with access to policy-specific decision-making power, a meaningful distinction that this indicator collapses.

Third, the finding may reflect a deeper structural tension within the Nordic model. Nordic welfare states have historically pursued growth and redistribution through high-consumption, high-energy-use economies. If women's political leadership has contributed to the expansion of social welfare, as the health and peace findings suggest, it may have inadvertently reinforced these consumption patterns rather than transforming them. This does not imply indifference to environmental concerns; Nordic environmental policies remain among the strongest globally. It suggests, rather, that the *marginal* effect of women's representation may be more pronounced in social domains than in environmental ones in contexts already characterized by robust environmental governance, a domain specificity with significant implications for interpreting cross-national gender equality indexes.

These findings carry substantial implications for how the field conceptualizes and measures the effects of gender-balanced political leadership. The relationship between women's representation and societal outcomes is fundamentally outcome-specific: health and peace show consistent positive associations; inequality shows no linear relationship; and environmental impact shows a counterintuitive positive association. Future research should move decisively beyond "Does women's political leadership matter?" toward more precise questions about *which* outcomes are affected, through which mechanisms, and across *what* temporal horizons.

Methodologically, the study underscores the limitations of parliamentary percentage as a singular indicator. This critique aligns with the literature gap identified by Widanti (2023) regarding the lack of quantitative frameworks for selecting indicators of women's political empowerment across contexts. The findings suggest that such frameworks must account for: (1) the distribution of women across committees and ministerial portfolios, not merely aggregate parliamentary presence; (2) the institutional and temporal conditions under which descriptive

representation translates into substantive policy outcomes; (3) the intersecting axes of race, class, and migration status that mediate the distribution of benefits from gender-balanced leadership; and (4) the domain-specificity of representational effects, with social outcomes responding to women's presence in ways that economic or environmental outcomes may not. Additionally, a significant limitation of this study is its reliance solely on parliamentary percentages. Women's presence in executive branches, particularly in ministerial portfolios such as finance, economy, and environment, may be more consequential for outcomes such as income inequality and ecological footprints than aggregate legislative representation. Future research should be disaggregated by executive versus legislative roles.

Finally, this study contributes to the debate between critical mass and critical actors by demonstrating that the two frameworks are not mutually exclusive but may operate at distinct stages of the representational process. Sustained high representation (critical mass) appears to generate the institutional conditions, stable welfare-state commitments, the normalized presence of women in public life, that enable critical actors to pursue transformative policy agendas. The Nordic case may represent a distinct regime type, in which the effects of gender-balanced leadership have become partially institutionalized, rendering them difficult to isolate through year-to-year variation. Future longitudinal research should therefore incorporate longer time horizons and structural break models capable of capturing the shift from "women entering politics" to "women governing within gender-equitable institutions", a distinction that existing indexes are poorly equipped to detect. The small-N focus on five Nordic countries limits the generalizability of our findings. Future research should extend this analytical framework to other world regions, including Central and South-Eastern Europe, Latin America, and East Asia, to test whether the outcome-specific patterns observed here (health and peace effects but not inequality effects) replicate across different institutional and cultural contexts.

5. CONCLUSION

This study set out to examine whether the effects of gender-balanced political leadership in the Nordic countries can be meaningfully captured by quantitative international indexes, and, more fundamentally, what those numbers actually reveal about the societies they intend to describe. What emerges affirms the genuine achievements documented in global rankings while exposing the conceptual and methodological limits of the instruments used to produce them.

The results demonstrate that the relationship between women's parliamentary representation and societal outcomes is fundamentally outcome-specific. Health and peace show consistent positive associations, confirming that even within robust welfare states, women's political leadership carries real consequences for population

well-being. The environmental findings, however, disrupt any simplistic narrative of uniform progress: increased female representation correlates with higher ecological footprints – a result that illuminates the temporal dynamics of policy change, the limitations of descriptive representation as a standalone indicator, and the structural tensions embedded within the Nordic welfare model.

The most theoretically instructive findings concern inequality. The absence of a significant linear relationship between women's representation and income inequality is not, on closer inspection, a null result, it is a diagnostic one. It points to the limitations of aggregate measures like the Gini Coefficient, which obscure the stratified nature of inequality within Nordic societies. Drawing on intersectional scholarship (Keskinen *et al.*, 2019), this study argues that the benefits of gender-balanced leadership may accrue unevenly, with racialized and immigrant women experiencing fewer gains than their native-born counterparts, a dimension of inequality that mainstream indexes systematically fail to capture. Reframed in this way, the null finding becomes a critical commentary on whose interests women parliamentarians advance and whether gender-balanced leadership, absent sustained attention to intersecting axes of race, class, and migration status, can meaningfully address structural inequality.

Methodologically, this study underscores the inadequacy of parliamentary percentages as a singular indicator of political empowerment, a critique that speaks directly to the gap identified by Widanti (2023). Any adequate framework must account for the distribution of women across committees and ministerial portfolios; the institutional and temporal conditions under which descriptive representation translates into substantive outcomes; the intersecting axes of stratification that mediate the distribution of benefits; and the domain-specificity of representational effects.

Theoretically, this study demonstrates that critical mass and critical actors' frameworks are not mutually exclusive, they may operate at distinct stages of the representational process. Sustained high representation appears to generate the institutional conditions that enable critical actors to pursue transformative policy agendas. The Nordic case, with its four-decade history of high women's representation, may constitute a distinct regime type, in which the effects of gender-balanced leadership have become partially institutionalized, rendering them difficult to isolate through year-to-year variation alone.

Ultimately, the Nordic "gender equity aura", while grounded in real achievements, is not a completed project but a contested terrain. Measuring its effects demands not only robust international rankings but methodological frameworks attentive to intra-regional variation and sensitive to what indexes cannot see. The numbers, on their own, tell an incomplete story. It is their critical interpretation, one attentive to institutional context, temporal dynamics, and intersecting inequalities, that reveals both what gender-balanced leadership can achieve and where its limits lie.

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