



## ORIGINAL PAPER

# Societal Security, Participation and Women's Representation in Political History. A Conceptual and Graphical Analysis Using Data Collection Methods in Google Ngram Viewer

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### Abstract:

**Introduction:** An important field of research on the role of women in contemporary political history centres on participation and representativeness, as well as the analysis of involvement in public policy and decision-making. **Research objectives:** The paper aims to analyse the participation and representativeness of women in political history by developing three research directions focused on: (a) examining the status of women in recent historiography (1950-2019); (b) analysis of the main concepts and associated topics in contemporary scientific literature; (c) analysis of some emerging constructs associated with the “gender history” field. **Research methodology:** The research uses the Ngram collection technique within the Google Books platform for the period 1950-2019. The analysis also reveals the frequencies of the analysed concepts and the conceptual associations that derive from the analysis of the literature published in the period at the centre of the analysis. **Results and discussions:** The results of our research are relevant in the much broader context of the analysis of women's participation and representativeness, as well as for the implications for contemporary political history, two patterns of analysis being identified: (a) women's participation and social changes and b) female political representation and the role of public policies in the contemporary period. **Conclusions:** The research highlights the role of female participation and representativeness arguing the need for proportional access of women in public life.

**Keywords:** *society, representativeness, participation, women, political history.*

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# **Societal Security, Participation and Women's Representation in Political History. A Conceptual and Graphical Analysis Using Data Collection Methods in Google Ngram Viewer**

## **Introduction**

An important area of research on the role of women in contemporary political history centres on participation and representativeness, as well as the analysis of women's involvement in public policy and decision-making. The paper aims to analyse the participation and representativeness of women in contemporary political history by developing three research directions: (a) examining the status of women in recent historiography (1950-2019) following a multidimensional framework and pointing on political systems and structure of society, social and political participation, role of local governance for women's participation; (b) analysis of the main concepts and associated topics in contemporary scientific literature gathering more than thirty topics; (c) analysis of some emerging constructs and analytical concepts associated with the "gender history" field.

## **Methods and methodology**

The research uses the Ngram collection technique within the Google Books platform. The Google Ngram Viewer method displays the key concepts or phrases selected for research and analysis (ngram) in a graph showing the frequency of occurrences over a given period of time. An n-gram reveals a sequence of words/concepts. For our analysis, the research introduces ngrams aimed to analyse the period 1950-2019. The language selected for viewing the research results is English. Moreover, the ngrams will be identified for each exposed graphic (Figure 1-Figure 15). In this context, the X-Axis identifies the year of the publication. Therefore, the analysis reveals the frequencies of the analysed concepts and the conceptual associations that derive from the analysis of the literature published in the period at the centre of the analysis (examples: "women's participation", "women's representation", "women and governance", "women and social history", "female leadership", "women and social history" etc.).

## **Literature review and analysis of the main concepts and associated topics in contemporary scientific literature**

The concepts of women's representation and participation in contemporary political history require a complex, multi-dimensional and multi-sectoral analysis that focuses on the multidisciplinary nature of the two concepts, as well as the integrated pattern of women's involvement at the level of policies and political decisions requiring an analysis of multiple guidelines needed to research the interconnections between:

(a) women's representativeness and the structure of political systems (Schwindt-Bayer & Mishler, 2005; Mechkova, Dahlum & Petrarca, 2022; Childs & Krook, 2009; Lühiste & Kenny, 2016: 626-641);

(b) women's political participation, legitimacy and local governance (Bilodeau, 2016; Celis & Childs, 2012; Stockemer, 2008; Stockemer, 2008: 65-73);

(c) women's public participation, human development and involvement in organizational and public management (Neureiter & Bhattacharya, 2022; Saeed, Riaz & Riaz, 2023; Olimid & Olimid, 2023: 60 – 67);

(d) the relationship between state, society, participation and women's representation (Gushchina & Kaiser, 2021: 934-953; Salmond, 2006: 175-204);

(e) the status of democratic governance and women's representation in political history (Monk, 2004: 1-22; Olimid, Georgescu, Gherghe, 2023: 126 – 138; Sainsbury, 2004: 65-87; Scharfenkamp, Wicker & Frick, 2023: 783–806), in the context of

community, societal and governance, in general, and Euro-Atlantic security and institutional resilience (Olimid, Georgescu, Gherghe, 2022a: 38-51; Olimid, Georgescu, Gherghe, 2022b: 34-46; Georgescu, Olimid, Gherghe, 2022: 82-96), peace-building, Europeanization and local self-government empowerment (Georgescu, 2015: 21-40).

### **Results and discussions**

The research phases engage a four-dimension framework pointing on:

A. the analysis of the frequency of use regarding the representation and participation of women, as well as the complementary analysis regarding some associated concepts and phrases such as: “gender and history”, “gender history”, “gender issues”, “gender quotas”, “gender studies” and “gender”. This perspective includes:

- A1. the analysis of the frequency of use of the concepts “female candidates”, “female participation”, “female representation” (“gender and history”, (the research results are presented in Figure 1);
- A2. the analysis of the frequency of use of concepts “gender history”, “gender issues”, “gender quotas”, “gender studies” (Figure 2);
- A3. the analysis of the frequency of associations with the concept of “gender” (Figure 3).

B. the analysis of the frequency of use of concepts related to the political representation of women, the social context and human development. This perspective includes:

- B1. the analysis of the frequency of use of the concepts “balanced representation of women”, “substantive representation of women”, “under-representation of women” (Figure 4)
- B2. the analysis of the frequency of association of the concepts “women and child development”, “women and children”, “women and development”, “women and equality” (Figure 5)
- B3. researching some mentions associated with the phrases “women and equality” and “equality of men and women” (Figure 6)

C. the analysis of the frequency of use of concepts related to the representation-participation-good governance nexus. This dimension points on:

- C1. the analysis of the frequency of use of the concepts “women and diplomacy”, “women in society”, “women and governance” (Figure 7)
- C2. the analysis of the frequency of use of the concepts “women and public policy” (Figure 8)
- C3. the analysis of the frequency of use of the phrases “women in politics”, “women and media”, “women leadership” (Figure 9)

D. the identification of the most frequent terminological associations with the concept “women...”. This dimension includes:

- D1. the identification of the most frequent associations with the concept “women” (Figure 10)
- D2. the identification of the most frequent associations with the phrase “women of all \*” (Figure 11)
- D3. the identification of the most frequent associations with the phrase “women of the\*” (Figure 12)
- D4. the results of the search for conceptual associations centered on: “women in \* politics” (Figure 13)

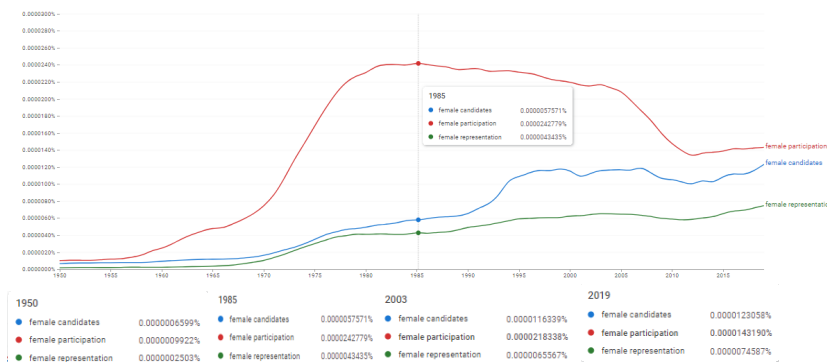
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- D5. the identification of the frequency of use of the phrase “women who enter(ed) politics” (Figure 14)
- D6. search results for the phrase "women are generally more\*" vs. “men are generally more\*” (Figure 15)
- D7. Search results for the associations between women and the concept of security (Figure 16).

### Graphical representation and data analysis

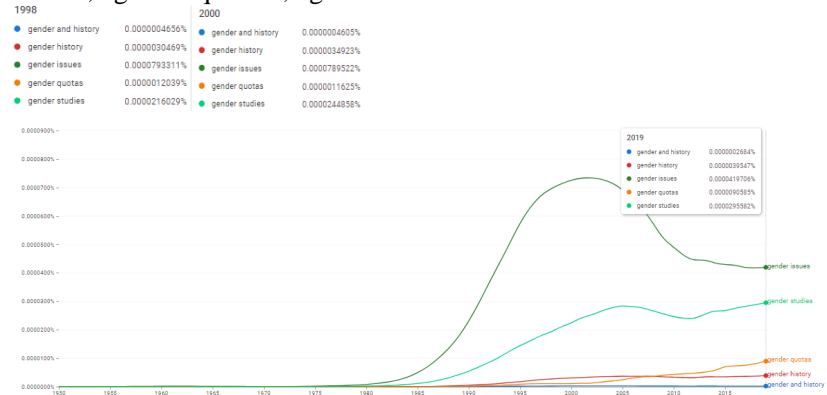
The next section discusses the results of the extensive online search using Google Ngram Viewer software for the concepts under scrutiny.

Figure 1. Concept use frequency for “female candidates”, “female participation”, “female representation”



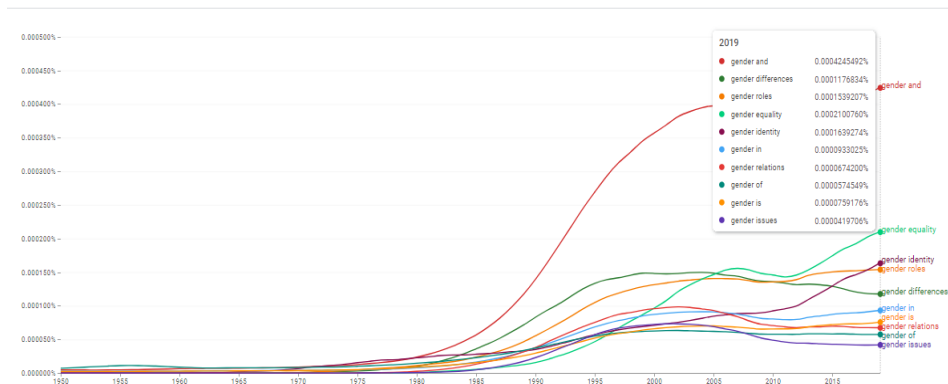
The analysis of concept use frequency for women’s in politics literature for the period 1950-2019 shows interesting results for “female candidates”, “female participation”, “female representation”; especially relevant for 1985 “female participation” reaches 0.0000242779%, while in 2019 the value decreases at 0.0000143190%. However, the highest values for “female candidates” and “female representation” are obtained in 2019 (with 0.0000123058% and 0.0000074587% respectively).

Figure 2. Concept use frequency for “gender and history”, “gender history”, “gender issues”, “gender quotas”, “gender studies”



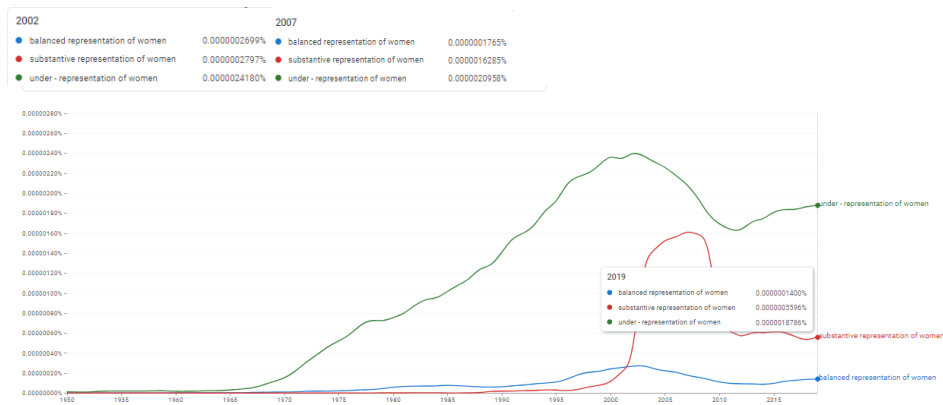
The results of concept use frequency search during 1950-2019 for “gender and history”, “gender history”, “gender issues”, “gender quotas”, “gender studies” are peculiarly interesting as shown in figure 2: for “gender issues” the peak was identified in 1998 (0.0000793311%, with an appreciable decrease until 2019 at 0.0000419706%). For “gender studies” the search shows a relative continuous growth in use with 0.0000295582%.

Figure 3. Frequency of conceptual associations with “gender” concept



The search for the most frequent associations of nouns with the concept of “gender” has revealed the following situation: “gender differences”, “gender roles”, “gender equality”, “gender identity”, “gender relations”, and “gender issues”. During the period 1950-2019 “gender equality” and gender identity” spiked in 2019 with 0.000210076% and 0.0001639274% respectively).

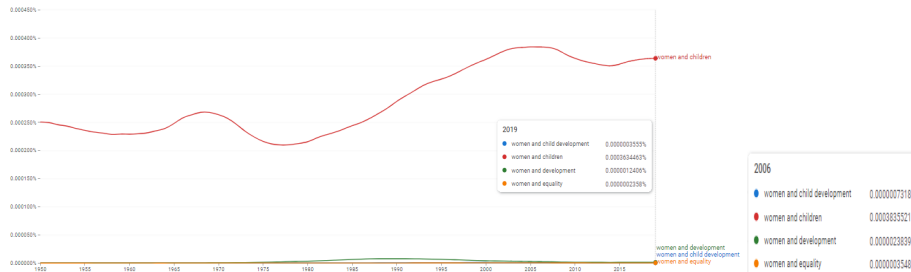
Figure 4. Concept use frequency for “balanced representation of women”, “substantive representation of women”, “under-representation of women”



As regards the phrase “representation of women”, the analysis of concept use frequency for “balanced representation of women”, “substantive representation of women”, “under-representation of women” shows significant results especially in 2002 for “under-representation of women” (0.000002418%) and 2007 for “substantive representation of women” (0.0000016285%).

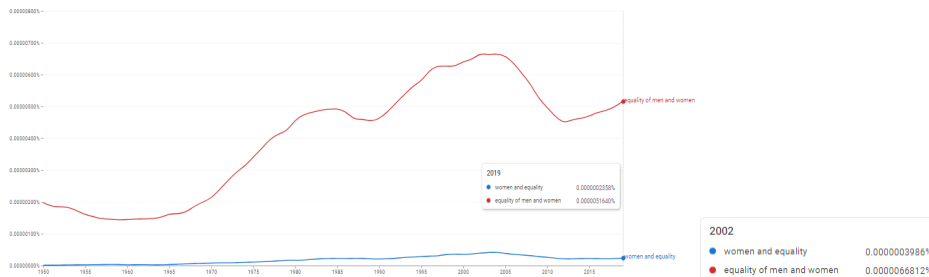
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Figure 5. Frequency of conceptual associations between “women and child development”, “women and children”, “women and development” and “women and equality”



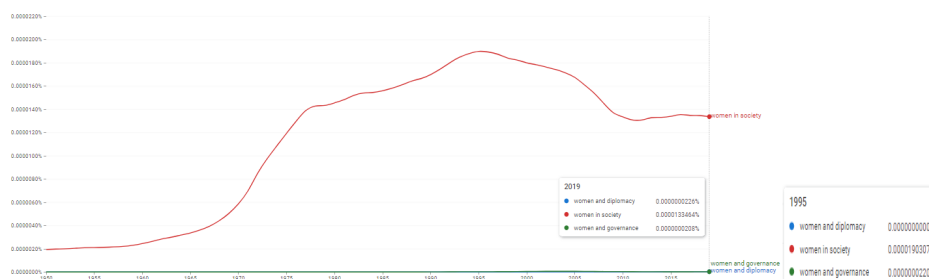
Next, the analysis of the frequency of conceptual associations between “women and child development”, “women and children”, “women and development” and “women and equality” between 1950-2019 shows that their use reached a peak in 2006 (for “women and children” 0.000383521%).

Figure 6. Syntagms mentions of “women and equality” and “equality of men and women”



Moreover, regarding the search for equality, the analysis employed the search for syntagms mentions of “women and equality” and “equality of men and women” and revealed the highest number of mentions in 2002 (0.0000003986% and 0.0000066812% respectively).

Figure 7. Concept use frequency for “women and diplomacy”, “women in society”, “women and governance”



A noteworthy situation is represented in figure 7 which shows the concept use frequency for “women and diplomacy”, “women in society”, “women and governance” and which highlights the placement of “women in society” concept at its peak in 1995 (0.0000190307%), with a relative minimal use for the concept “women and governance” and null results for “women and diplomacy”.

Figure 8. Concept use frequency for “women and public policy”

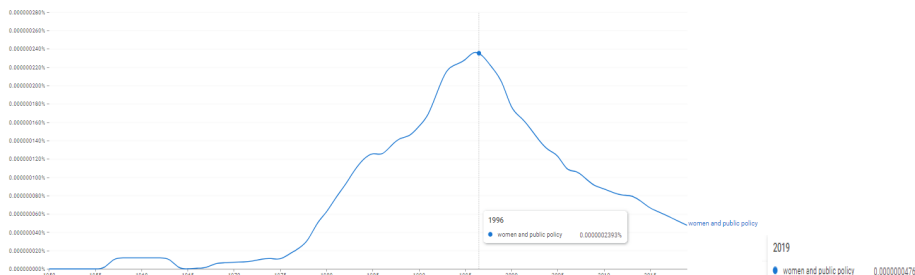


Figure 8 shows the frequency of mentions for “women and public policy” manifesting a steep increase in usage since 1975, a peak in 1996 (0.0000002393%) and a gradual decrease until 2019 (0.0000000476%).

Figure 9. Frequency of syntagms use “women and/in politics”, “women and/in media”, “women and/in leadership”

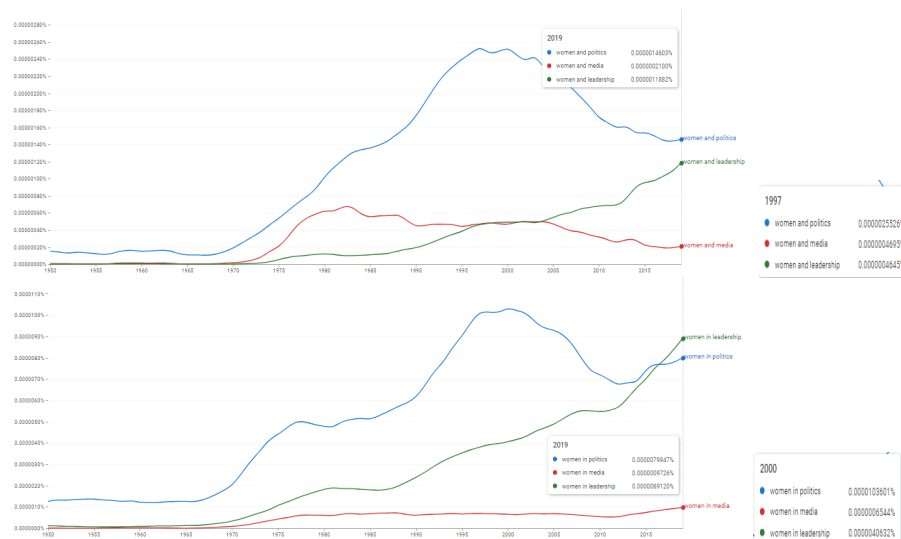


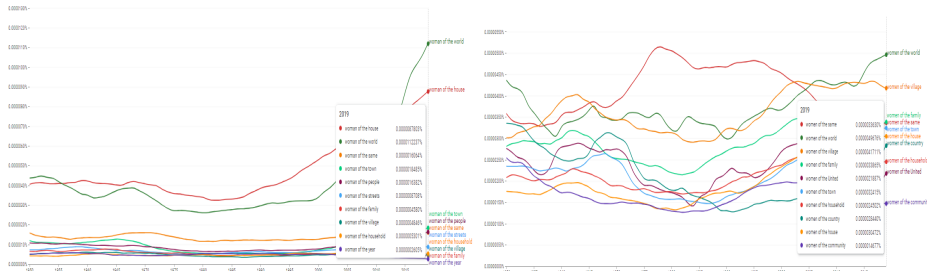
Figure 9 represents a comparative analysis of the usage of terms “women and politics”, “women and media”, “women and leadership” against the frequency of use for “women in politics”, “women in media”, “women in leadership”. The results show a peak in the use of “women and politics” in 1997, while for “women in politics” in 2000. “Women in media” on the other hand shows a continuous growth until 2019.





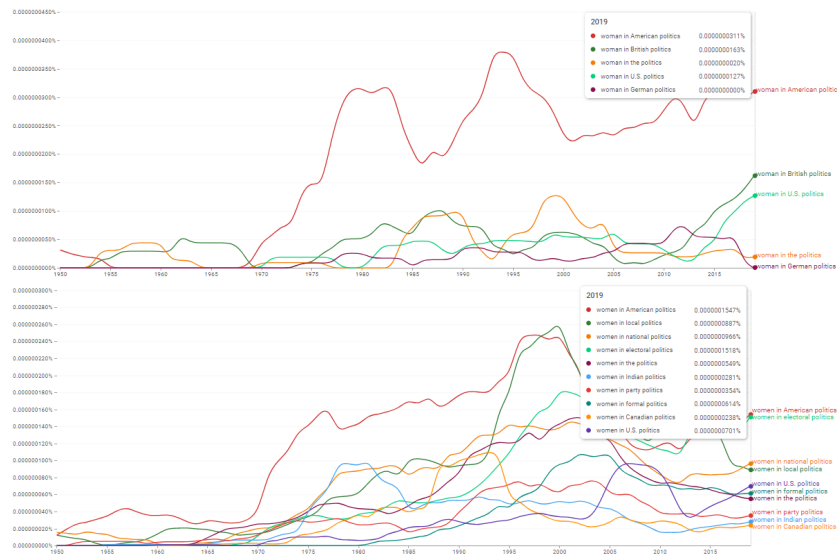
compared to those with “women of all” rendered obvious the following: the singular form was associated to nouns such as work, ages, others, times, people, while the plural was associated to the following nouns: ages, classes, races, social, nations, ranks, countries, and nationalities.

Figure 12. Identifying the most frequent associations with the phrases “woman of the” versus “women of the”



Another interesting discussion could be raised by the results of the comparative search presented in figure 12, which shows that the singular form is associated to the house, world, town, people, streets, family, village, household and year, while the plural form is associated to the concepts of world, village, family, United (States, given the search in the English language repositories), town, household, country, house and community.

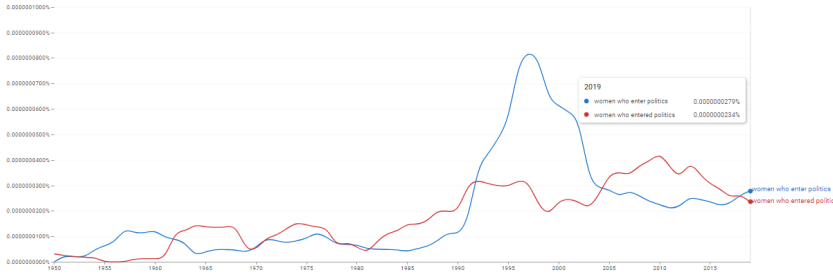
Figure 13. Conceptual associations for woman/women in politics



The search for the term “woman in politics” returned results such as American, US, German and British politics. The plural term, however, was more generously associated to American politics, electoral politics, national politics, local politics, US politics, formal politics, party politics, Indian politics and Canadian politics, taking into account the fact that the search was done exclusively for English language in use.

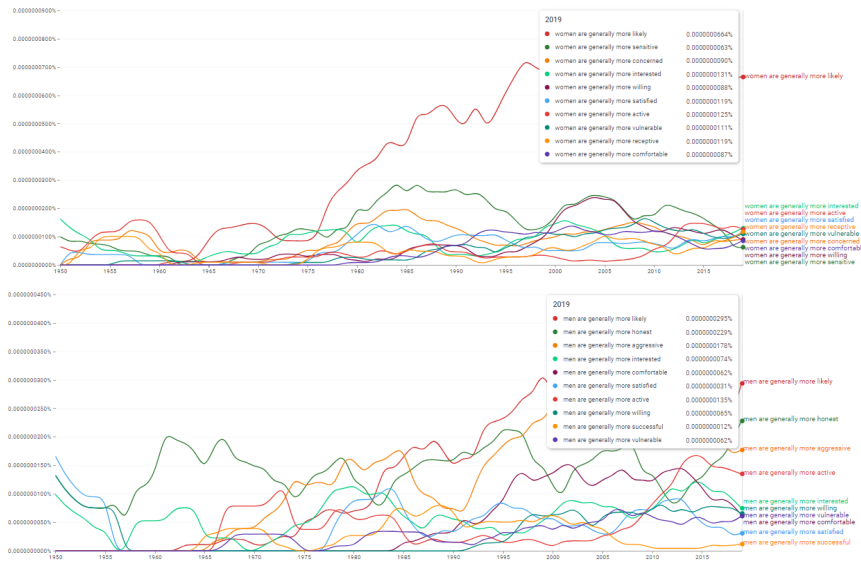
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Figure 14. Identifying the frequency of usage for the “women who enter(ed) politics”



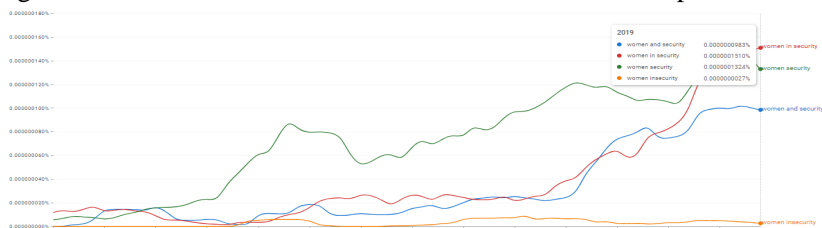
The search aimed at identifying the frequency of usage for the phrases “women who enter(ed) politics” shows a downturn in their usage towards 2019.

Figure 15. Comparing the associations for “women are generally more\*” and “men are generally more\*”



Furthermore, another aspect to note was the search undergone for comparing the associations for “women are generally more\*” and “men are generally more\*”. The results of searches for ngram occurrences during 1950-2019 show women to be generally more frequently associated to the following concepts: interested, active, satisfied, receptive, vulnerable, concerned, comfortable, willing, sensitive, while for men, the most frequent associations are: likely, honest, aggressive, interested, comfortable, satisfied, active, willing, successful, vulnerable.

Figure 16. Results for the associations between the concepts of women and security



The results of the search for the associations between the concepts of women and security show that the issue of security has gained momentous attention with the highest values registered towards 2019.

### Conclusions

The research highlights the role of female participation and representativeness, arguing the need for women's proportional access to public life. Moreover, the results of our research are relevant in the much broader context of the analysis of women's participation and representativeness, with a special focus on politics, the media and leadership, two patterns of complementary analysis being identified (a) women's participation, political history and social environment and b) female political representation, community encounters and the role of women in public policies and in public debates during the last decades.

The analyses show an increasing interest in women's roles in public life in recent history and multiple conversations regarding the women's presence in politics, governance, society, work space, within the aggregate discourse centred on equality, diversity, development and inclusiveness. The paper has succeeded in showing the most frequent conceptual associations centred on women's security, participation and representation in political history focusing on different layers of implication in the politics, policies, polity nexus filtered by Ngram Viewer search engine of the Google books platform.

### Authors' Contributions:

The authors contributed equally to this work.

### References:

- Bilodeau, A. (2016). Migrating Gender Inequalities? Immigrant Women's Participation in Political Survey Research. *Int Migr Rev*, 50, 951-976. <https://doi.org/10.1111/imre.12194>
- Celis, K. & Childs, S. (2012). The Substantive Representation of Women: What to Do with Conservative Claims?. *Political Studies*, 60, 213-225. <https://doi.org/10.1111/j.1467-9248.2011.00904.x>
- Childs, S. & Krook, M.L. (2009). Analysing Women's Substantive Representation: From Critical Mass to Critical Actors. *Government and Opposition*, 44, 125-145. <https://doi.org/10.1111/j.1477-7053.2009.01279.x>
- Georgescu, C.M., Olimid, A.P., Gherghe, C.L. (2022). Euro-Atlantic Security and Institutional Resilience: Analyzing the Conceptual Use and Topical Variations, *Revista de Științe Politice. Revue des Sciences Politiques*, no. 74, 82-96, 1584-224X, [https://cis01.ucv.ro/revistadestiintepolitice/files/numarul74\\_2022/8.pdf](https://cis01.ucv.ro/revistadestiintepolitice/files/numarul74_2022/8.pdf)

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- Georgescu, C. M. (2015) Peace-building, Europeanization and Local Self-Government Empowerment. A Cross-Country Constitutional and Democratization Indices Analysis in the Balkans, *Revista de Științe Politice. Revue des Sciences Politiques*, no. 47, 21-40, [http://cis01.central.ucv.ro/revistadestiintepolitice/numarul47\\_2015.php](http://cis01.central.ucv.ro/revistadestiintepolitice/numarul47_2015.php)
- Gushchina, K. & Kaiser, A. (2021), Multilevel governance and women's legislative representation. *European Journal of Political Research*, 60, 934-953. <https://doi.org/10.1111/1475-6765.12431>
- Lühiste, M. & Kenny, M. (2016). Pathways to power: Women's representation in the 2014 European Parliament elections. *European Journal of Political Research*, 55, 626-641. <https://doi.org/10.1111/1475-6765.12144>
- Mechkova, V., Dahlum, S., & Petrarca, C. S. (2022). Women's political representation, good governance and human development. *Governance*, 1–20. <https://doi.org/10.1111/gove.12742>
- Monk, J. (2004). Women, Gender, and the Histories of American Geography. *Annals of the Association of American Geographers*, 94, 1-22. <https://doi.org/10.1111/j.1467-8306.2004.09401001.x>
- Neureiter, M., & Bhattacharya, C. B. (2022). Women's movements and female board representation. *Business and Society Review*, 127(4), 809–834. <https://doi.org/10.1111/basr.12290>
- Olimid, A.P., Georgescu, C.M., Gherghe, C.L. (2023). Integrated Analysis of Sixty Democracy Governance and Policy Reform Topics using Ngram Tool for Google Platform (1990-2019). *Revista de Științe Politice. Revue des Sciences Politiques*, no. 78, 126 – 138. [https://cis01.ucv.ro/revistadestiintepolitice/files/numarul78\\_2023/11.pdf](https://cis01.ucv.ro/revistadestiintepolitice/files/numarul78_2023/11.pdf)
- Olimid, A.P., Olimid, D.A. (2023). On State-Society Relations: Findings in EU Legislation on Information Society, Human Determinants and Social Data using IRAC Method (2000- 2019). *Revista de Științe Politice. Revue des Sciences Politiques*, no. 78, 60 – 67. [https://cis01.ucv.ro/revistadestiintepolitice/files/numarul78\\_2023/5.pdf](https://cis01.ucv.ro/revistadestiintepolitice/files/numarul78_2023/5.pdf)
- Olimid, A.P., Georgescu, C.M., Gherghe, C.L. (2022a). Influences of Covid-19 Crisis on Resilience Theories: An analysis of Community, Societal and Governance Resilience. *Revista de Științe Politice. Revue des Sciences Politiques*, no. 73, 38-51.
- Olimid, A.P., Georgescu, C.M., Gherghe, C.L. (2022b). Approaches to Environmental Security and Social Resilience: A Case Study on Policy Theories and Practices, *Revista de Științe Politice. Revue des Sciences Politiques*, no. 76, 34-46, <https://cis01.ucv.ro/revistadestiintepolitice/acces.php>.
- Saeed, A., Riaz, H., & Riaz, S. (2023). Women's representation in top management teams of emerging markets' multinationals in developed countries: A legitimacy perspective. *Human Resource Management Journal*, 1–25. <https://doi.org/10.1111/1748-8583.12522>
- Sainsbury, D. (2004). Women's Political Representation in Sweden: Discursive Politics and Institutional Presence. *Scandinavian Political Studies*, 27, 65-87. [https://doi.org/10.1111/j.0080-6757.2004.100\\_1.x](https://doi.org/10.1111/j.0080-6757.2004.100_1.x)
- Salmond, R. (2006). Proportional Representation and Female Parliamentarians. *Legislative Studies Quarterly*, 31, 175-204. <https://doi.org/10.3162/036298006X201779>

- Scharfenkamp, K., Wicker, P. & Frick, B. (2023). Female representation at the national level and women sport volunteering in European countries. *Nonprofit Management and Leadership*, 33(4), 783–806. <https://doi.org/10.1002/nml.21550>
- Schwindt-Bayer, L.A. & Mishler, W. (2005). An Integrated Model of Women's Representation. *Journal of Politics*, 67, 407-428. <https://doi.org/10.1111/j.1468-2508.2005.00323.x>
- Stockemer, D. (2008). Women's Representation: A Comparison between Europe and the Americas. *Politics*, 28, 65-73. <https://doi.org/10.1111/j.1467-9256.2008.00313.x>

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