

Byung-Deuk Woo

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Academic Positions and Affiliations

The Institute of Social Data Science, Pohang University of Science and Technology, Korea
Research Assistant Professor 2023–Present
Postdoctoral Researcher 2022–2023

Degrees

University of Iowa, Iowa City, IA, United States 2017–2021
Ph.D. Political Science
Fields: *Comparative Politics, Political Methodology, American Politics (minor)*

Dissertation: *Re-Examining the Origins of Policy related to Violence Against Women: The Role of Women’s Descriptive Representation in Achieving Substantive Representation*

Committee: *Frederick Solt (Chair), Frederick J. Boehmke, Tracy Osborn, William M. Reisinger, Celeste Montoya (University of Colorado Boulder)*

Hankuk University of Foreign Studies, Seoul, South Korea 2011–2017
B.A. Political Science and International Relations

Professional Training

ICPSR Summer Program, University of Michigan Summer 2018
Causal Inference for the Social Sciences, Multilevel Model 2: Advanced Topics

Research and Teaching Interests

Comparative Politics:

Introduction to Comparative Politics, Democracy, Political Parties, Korean Politics, Political Institutions, Legislative Politics, Women and Politics

Political Methodology:

Introductory Statistics, Time-Series Cross-National Analysis, Event History (Survival) Analysis, Multilevel Analysis, Causal Inference, Data Science (R, Python, and Stata), Text Analysis, Machine Learning

International Relations:

Introduction to International Relations, Politics of Epidemics

Refereed Publications

“[SSCI]”: Indexed in Social Science Citation Index

“[KCI]”: Indexed in Korea Citation Index

“*”: Corresponding Author

[2023]

25. **Woo, Byung-Deuk** and Young Bae*, “An Analysis on the Driving Factors of Population Changes in Local Provinces: Clues from News Big Data Analytics and Evidence from Empirical Analysis.” *Information Society & Media*, 24(1): 221-260. [KCI].
24. Bae, Young and **Byung-Deuk Woo***, “Framing Effects in Surveys for the Acceptance Toward Nuclear Energy and Nuclear Power Plant.” *Survey Research*, Forthcoming. [KCI].

23. **Woo, Byung-Deuk*** and Na Kyeong Lee, “An Empirical Assessment of the Effectiveness of Gender Budget Initiatives on Women’s Political Empowerment.” *Asian Journal of Women’s Studies*, <https://doi.org/10.1080/12259276.2023.2206184>. [SSCI].
22. Bae, Young, **Byung-Deuk Woo***, Sungwon Jung, Eunghae Lee, Jiin Lee, Mingu Lee, and Haegyun Park. “The Relationship Between Government Response Speed and Sentiments of Public Complaints: Empirical Evidence From Big Data on Public Complaints in South Korea.” *Sage Open*, 13(2): 1-14. [SSCI].
21. **Woo, Byung-Deuk**, “A Plausible Way to Explain Mixed Results about the Reasons behind North Korea’s Provocations: A Classification of Provocations and an Application of Multilevel models.” *Korean Social Science Journal*, Forthcoming. [KCI].

[2022]

20. **Woo, Byung-Deuk** and Jeongho Choi*, “The Influence of Subnational Democracy on the Level of Public Health: A Case of Nigeria.” *Comparative Democratic Studies*, 18(2): 5-28. [KCI].
19. **Woo, Byung-Deuk** and Jungmin Song*. 2022. “Voter Waiting Times and Voter Turnout: Reneging Effect and Racial Disparity.” *Korean Political Science Review*, 56(6): 5-39. [KCI].
18. **Woo, Byung-Deuk**. 2022. “The Link between Women’s Descriptive Representation in Subnational Legislatures and Women-Friendly Bill Sponsorship - An Empirical Evidence from South Korea.” *Journals of Women’s Studies*, 32(2): 7-38. [KCI].
17. Reisinger, William M.*, Marina Zaloznaya, and **Byung-Deuk Woo**. 2023. “Fear of Punishment as a Driver of Survey Misreporting and Item Non-Response in Russia and its Neighbors.” *Post-Soviet Affairs*, 39(1-2): 49-59. [SSCI].
16. Lee, Jiin, **Byung-Deuk Woo***, Mingu Lee, and Seyoon Park. 2022. “Analyzing the Discourse of Hatred and its Relationship with Policymaking Process Using Topic Modeling and Logistic Regression.” *Journal of the Korean Data Analysis Society*, 24(5): 1989-2007. [KCI].
15. **Woo, Byung-Deuk** and Young Bae*. 2022. “The Knowledge of Radiation and Radioactive Waste and the Public Acceptance of Nuclear Power Generation” *Korean Social Science Journal*, 49(2): 57-71. [KCI].
14. **Woo, Byung-Deuk** and Ki Eun Ryu*. 2023. “The Nonlinear Impact of Women’s Descriptive Representation: An Empirical Study on the Ratification of Women Rights Treaties.” *Contemporary Politics*, 29(1): 114-140. [SSCI].
13. **Woo, Byung-Deuk**, Lindsey Goldberg, and Frederick Solt*. 2022. “Public Gender Egalitarianism: A Dataset of Dynamic Comparative Public Opinion toward Egalitarian Gender Roles in the Public Sphere.” *British Journal of Political Science*, 53(2): 766-775. [SSCI].
12. **Woo, Byung-Deuk**. 2022. “The Impacts of Gender and Electoral System on Environmental Bill Sponsorship: Evidence from the 17th and 20th Korean National Assembly.” *Journal of Future Politics*, 12(1): 79-115. [KCI].
11. **Woo, Byung-Deuk**. 2022. “The Impacts of Gender-Related Factors on the Adoption of Anti-Human Trafficking Laws in Sub-Saharan African Countries.” *Sage Open*, 12(2): 1-17. [SSCI].
10. **Woo, Byung-Deuk**. 2022. “The Impacts of Gender and Previous Cosponsoring Experience of Legislators on the Violence Against Women Bills Sponsorship: An Empirical Analysis of the Korean National Assembly.” *Social Science Studies*, 30(1): 88-130. [KCI].

9. **Woo, Byung-Deuk** and Ki Eun Ryu*. 2022. “Women’s Descriptive Representation and Ratification of International Human Rights, Environmental and Women’s Rights Treaties.” *Journal of Contemporary Politics*, 15(1): 113-151. [KCI].
8. Lee, Na Kyeong, Jae Mook Lee, and **Byung-Deuk Woo***. 2022. “The Link between Public Health Crisis and Presidential Approval: Evidence from the COVID-19 in South Korea.” *Korea Observer*, 53(1): 105-133. [SSCI].

[2021]

7. **Woo, Byung-Deuk**. 2021. “The Heterogeneous Impacts of the Ratification of CEDAW on the Adoption of Violence Against Women Laws.” *Korean Journal of International Studies*, 19(3): 339-375. [KCI].
6. Choi, Jeongho and **Byung-Deuk Woo***. 2021. “The Legacy of Pro-Democracy Mass Protest and Democratic Survival: A Cross-National Survival Analysis from 1946 to 2016.” *Social Science Studies*, 29(2): 76-125. [KCI].
5. **Woo, Byung-Deuk**. 2021. “Women’s Descriptive Representation Facilitates the Adoption and Implementation of Laws Relating to Violence Against Women: Evidence from Asian Countries.” *Asian Women*, 37(2): 1-33. [SSCI].
4. **Woo, Byung-Deuk**. 2021. “The Link between the Adoption of Policies Addressing Violence Against Women and Women’s Descriptive Representation in Parliaments: Empirical Evidence from a Time-Series Cross-National Analysis.” *Journals of Women’s Studies*, 31(1): 89-134. [KCI].
3. **Woo, Byung-Deuk**. 2021. “The Effective Number of Political Parties as a Determinant of Public Health.” *The Journal of Social Paradigm Studies*, 35(3): 39-95. [KCI].

[2020]

2. **Woo, Byung-Deuk**. 2020. “Does the ROK-U.S. Military Alliance deter Missile Provocations from North Korea? A Plausible Answer from Statistical Approach.” *Korean Journal of Security Affairs*, 25(2): 102-126. [KCI].

[2019]

1. **Woo, Byung-Deuk**. 2019. “Why does North Korea Commit Provocations?” *Korean Journal of Defense Analysis*, 31(1): 43-59. [SSCI].

Under Review

[After First Decision]

7. **Woo, Byung-Deuk** and Hoshik Nam*, “Women and Peace Theory and Civil Conflict Intensity.” Revised and resubmitted from *Sage Open*.
6. **Woo, Byung-Deuk**, “The Impacts of Anti-Feminist Backlash in SNSs on Legislators’ Bill Sponsorship concerning Violence Against Women: Empirical Evidence from South Korea.” Revised and resubmitted from *Women’s Studies Review*.
5. **Woo, Byung-Deuk*** and Hye-Young Kim. “Gender-Based Bias against Female Parliamentarians in the Media Coverage and Tone: An Empirical Analysis of South Korea.” Invited to revise and resubmit from *Politics & Gender*.

[Before First Decision]

4. **Woo, Byung-Deuk** and Jungmin Song*, “Understanding the Reneging on Vote: Examining the Interaction between Voter Waiting Times and Gender.”
3. Choi, Jeongho and **Byung-Deuk Woo***, “Support for a Strong Leader or Democracy, or Both?”
2. **Woo, Byung-Deuk** and Ki Eun Ryu*, “The Determinants of Public Gender Egalitarianism at the National Level: A Cross-National Time-Series Analysis.”
1. Hu, Yue, Yuehong Cassandra Tai, Hyein Ko, **Byung-Deuk Woo**, and Frederick Solt*, “Support for Democracy is Multidimensional: Why Unidimensional Latent Variable Measures of Democratic Support Are Invalid.”

Works in Progress

– Working Papers

10. The Connectedness between Sentiment and Attitude in Political Areas
9. Gendered Punishment? How The Public Perceives a Failed Female Political Leader [with Tracy Osborn and Mi-son Kim].
8. The Influence of Female Legislators on the Legislative Behaviors of Male Counterparts: Evidence from South Korea.
7. The Conditional Relationship among Gender, Electoral Systems, and Issue Salience on Bill Sponsorship Concerning Environmental Issues.
6. Public Support for Democracy and Different Patterns of Democratic Backsliding [with Jeongho Choi].
5. The Influence of Norms on State Action on the Provision of Public Goods Concerning Violence Against Women.
4. Social Network with Female Legislators and Male Legislators' Legislative Behavior.
3. The Degree of Subordination and Interstate Conflicts: the Case of Two Koreas and the U.S. Hierarchy.
2. How does Partisanship Affect Individuals' Attitude Toward Immigration Policy? [with Jeongho Choi].
1. Measuring the Acceptance of Homosexuality Across Countries and Over Time [with Hyein Ko, Yuehong Cassandra Tai, Yue Hu, Frederick Solt].

– Book Projects

1. Gender Egalitarianism and Gender Equality: Public Opinion, Politics, and Policy in Global Perspective [with Frederick Solt]
This book project is funded by Korea Inequality Research Lab, Gachon College of Liberal Arts & Sciences and Graduate School of Social Policy, Gachon University.

Datasets and Software

2. Solt, Frederick, **Byung-Deuk Woo**, and Lindsey A. Goldberg. 2022. Public Gender Egalitarianism Database, Version 1.0. <https://doi.org/10.7910/DVN/WF3USY>
1. Solt, Frederick, Yuehong Cassandra Tai, Yue Hu, Hyein Ko, and **Byung-Deuk Woo**. 2019. “DCPOtools: Tools for Preparing Survey Data for DCPO.” <https://github.com/fsolt/DCPOtools>
Dynamic Comparative Public Opinion (DCPO) analyses generate estimates of latent public opinion that are comparable across countries and over time from hundreds or thousands of surveys, but collecting and formatting these survey data is a formidable challenge. The DCPOtools package streamlines these initial steps, providing tools for downloading survey datasets, extracting the needed data, correctly identifying and standardizing the countries and years surveyed, applying survey weights, and arranging the resulting information into the format required to generate DCPO estimates.

Other Publications

1. **Byung-Deuk Woo**. 2019. “AI 기반 방법론과 빅데이터의 사회과학적 활용(AI-based Methodology and Social Scientific Application of Big Data)” *Digital Society*, 47.
– Published by Center for Digital Social Science at Yonsei University.

Teaching Experience

– Pohang University of Science and Technology

Course Developer, Guest Lecturer and Department Service

Guest Lecturer: Social Issues and Trend Analysis (PSDS:601) Spring 2023

Taught six-session lectures related to social issues and trends in South Korea for international students.

Guest Lecturer: Intro. of Advanced Nuclear Convergence of Future Society (NUCE: 719C) Spring 2023

Taught two-session lecture related to nuclear power, social conflicts, and the convergence of social science and nuclear technology.

Guest Lecturer: Social Science and Data Analysis (PSDS:501) Fall 2022

Taught four-session lectures related to social science and data analysis

Instructor: Introduction to R and Statistical Analysis Summer 2022

Taught week-long basic mathematics, statistics, and R course for students.

Guest Lecturer Nuclear Power and Social Issues-Lectures for International Students (NUCE:503) Spring 2022

Taught six-session lectures related to nuclear power and social issues in South Korea for international students.

Guest Lecturer: Intro. of Advanced Nuclear Convergence of Future Society (NUCE: 719C) Spring 2022

Taught two-session lecture related to nuclear power, social conflicts, and the convergence of social science and nuclear technology.

– University of Iowa

Instructor

Politics of Epidemics: International Conflict and Cooperation (POLI:3550) Fall 2020

Introduction to American Foreign Policy (POLI:1501) Fall 2019

Teaching Assistant

Introduction to Politics of Class & Inequality (POLI:1800) Spring 2021

American Public Policy (POLI:3111) Spring 2019

Introduction to American Foreign Policy (POLI:1501) Fall 2018, Spring 2020

Introduction to Comparative Politics (POLI:1400) Spring 2018

International Conflict (POLI:3512) Fall 2017

Course Developer, Guest Lecturer and Department Service

Course Developer and Guest Lecturer: Introduction to Comparative Politics Summer 2021

Developed the Introduction to Comparative Politics course. Provided seven-session lectures related to Regime Types, Electoral Institutions and Political Parties, Party Systems, Measures of Regime Types and Regime Changes, Globalization, Gender and Politics, and Comparative Approaches.

Instructor: Math Camp Summer 2020, Summer 2021

Taught week-long basic mathematics and statistics course for incoming graduate students.

Instructor: Review from OLS to MLE Summer 2020

Taught four-session reviews of OLS to MLE for 2nd year graduate students.

Guest Lecturer: Intro Methods Fall 2019
Taught three-session lectures related to visualization through STATA and R, Monte Carlo Simulation, basic STATA commands for OLS and Logistic Regression for 1st year graduate students.

Department Service Collaboratory Manager Fall 2019–Spring 2020
Gave undergraduate students, graduate students, and faculty members advice and help with methodology, statistics, STATA, and R.

Research Experience

– Pohang University of Science and Technology

Researcher for Brain Korea 21 Advanced Nuclear Power Convergence Education Research for Future Society 2022–Present
Research Grant (\$1,876,268,847 Korean Won) from the South Korean Ministry of Education

Researcher for the Regional Cooperation Measures to Increase Public Acceptance of Nuclear Power Plants 2022–Present
Research Grant (100,000,000 Korean Won) from the South Korean Ministry of Trade, Industry, and Energy

POSCO Group Organizational Culture Research 2022–2023
Research Grant (\$450,000,000 Korean Won) from the POSCO Research Institute

Researcher for the Development of Social Data Science Major 2022–2023
Research Grant (750,000,000 Korean Won) from the SK Hynix Inc.

Researcher for Fostering Students with Convergent Thinking Ability to Enhance Corporate Social Value 2022–2023
Research Grant (\$400,000,000 Korean Won) from the POSCO Research Institute

– University of Iowa

Research Assistant for Prof. William Reisinger Summer 2020
Project: Survey List Experiment on Eurasian Countries.

Research Assistant for Prof. Elise Pizzi Summer 2019
Project: Migration in China.

Conference Presentations and Workshops

[2022]

19. Lee, Jiin, **Byung-Deuk Woo**, Mingu Lee, and Seyoon Park. “Analyzing the Discourse of Hatred and its Relationship with Policymaking Process Using Topic Modeling and Logistic Regression”, Winter Conference of The Korean Association for Information Society, 2022.
18. **Woo, Byung-Deuk** and Ki Eun Ryu. “The Determinants of Public Gender Egalitarianism at the National Level: A Cross-National Times-Series Analysis”, Annual Conference of the Korean Association of International Studies, 2022.
17. **Woo, Byung-Deuk** and Jungmin Song. “Voter Waiting Times and Voter Turnout: Reneging Effect and Racial Disparity”, Seminar of American Politics Research Society, 2022.

16. Lee, Jiin, **Byung-Deuk Woo**, Mingu Lee, and Seyoon Park. “Analyzing the Discourse of Hatred and its Relationship with Policymaking Process Using Topic Modeling and Logistic Regression”, 7th Academic Conference of The Korea Press Foundation-Korean Association for Communication and Information Studies, 2022.
 15. **Byung-Deuk Woo** and Frederick Solt, “Gender Egalitarian Politics in the Korean National Assembly”, American Political Science Association, 2022.
 14. **Byung-Deuk Woo** and Frederick Solt, “Gender Egalitarianism and Gender Equality: How Public Opinion Shapes Politics and Policy in Global Perspective”, Korea Inequality Research Lab Annual Workshop, 2022.
 13. **Byung-Deuk Woo**, “The Link between Women’s Descriptive Representation in Subnational Legislatures and Women-Friendly Policy Adoption by Subnational Governments: An Empirical Evidence from South Korea”, Spring Conference of The Korean Association of Party Studies-The Korean Association of Electoral Studies, 2022.
 12. **Byung-Deuk Woo**, “The Impacts of Anti-Feminist Backlash in SNSs on Legislators’ Bill Sponsorship concerning Violence Against Women: Empirical Evidence from South Korea”, Spring Conference of The Korean Association for Information Society–The Korean Media Management Association, 2022.
 11. **Byung-Deuk Woo**, Lindsey Goldberg, and Frederick Solt*, “Public Gender Egalitarianism: A Dataset of Dynamic Comparative Public Opinion Toward Egalitarian Gender Roles in the Public Sphere”, Midwest Political Science Association, 2022.
 10. Choi, Jeongho and **Byung-Deuk Woo**, “The Impacts of Public Support for Democracy on Different Patterns of Democratic Backsliding”, Midwest Political Science Association, 2022.
 9. **Byung-Deuk Woo**, Tracy Osborn, and Mi-son Kim, “Gendered Punishment? How the Public Perceives a Failed Female Political Leader”, Midwest Political Science Association, 2022.
 8. Choi, Jeongho and **Byung-Deuk Woo**, “Public Support for Democracy and Different Patterns of Democratic Backsliding”, Southern Political Science Association, 2022.
- [2021]
7. **Woo, Byung-Deuk**, “The Origins of Violence Against Women Laws and Women’s Descriptive Representation: The Case of Korean National Assembly, 1948–2020”, Joint Conference of Korean Political Science Association–American Political Science Association, 2021.
 6. **Woo, Byung-Deuk** and Hoshik Nam, “Women and Peace Theory and Civil Conflict Intensity”, International Studies Association Midwest Annual Conference, 2021.
 5. **Woo, Byung-Deuk** and Frederick Solt, “Gender Egalitarianism and Gender Equality: How Public Opinion Shapes Politics and Policy in Global Perspective”, Korea Inequality Research Lab Annual Workshop, 2021.
- [2020]
4. Reisinger, William M, Marina Zaloznaya, and **Byung-Deuk Woo**, “What Drives Biases in Self-Reported Corruption Behavior? Fear of Punishment, Bureaucratic Sphere, and Individual Attributes in Four Eurasian Countries”, European Consortium for Political Research, 2020.
- [2019]
3. **Woo, Byung-Deuk**, “Diffusion after Diffusion: Adoption and Implementation of Laws about Violence Against Women”, Midwest Political Science Association, 2019.
 2. **Woo, Byung-Deuk** and Si-ae Kim, “The Influence of Subnational Democracy on Public Health: A Case of Nigeria”, Midwest Political Science Association, 2019.
 1. **Woo, Byung-Deuk**, “Do More Political Parties Increase the Quality of Democracy?”, Southern Political Science Association, 2019.

Awards and Honors

[2023]

15. Research Grant (\$1,000), Pohang Iron and Steel Co. – Cooperate Citizenship Research Institute

[2022]

14. Research Grant (\$3,000), The Korea Press Foundation
13. Research Grant (\$3,000), The Korean Sociological Association

[2021]

12. Travel Grant (\$700), Department of Political Science, University of Iowa
11. Graduate College Summer Fellowship (\$5,000), University of Iowa
10. Graduate Post-Comp Research Fellowships (\$10,500), University of Iowa

[2019]

9. Travel Grant (\$400), Department of Political Science, University of Iowa
8. GSS/Graduate College Presentation Travel Funds (\$750), University of Iowa

[2018]

7. Summer Training Grant (\$2,400), Department of Political Science, University of Iowa
6. Travel Grant (\$500), Department of Political Science, University of Iowa

[2017]

5. Summa Cum Laude, Hankuk University of Foreign Studies

[2016]

4. Political Science Dean's Fellowship (\$3,000), Hankuk University of Foreign Studies

[2015]

3. Exchange Student Scholarship (\$3,000), Hankuk University of Foreign Studies

[2014]

2. Presidential Fellowship (\$3,000), Hankuk University of Foreign Studies

[2012]

1. Political Science Dean's Fellowship (\$3,000), Hankuk University of Foreign Studies

Service and Experience

8. Discussant, Experimental Political Science Research Seminar Series #2, Experimental Political Science Research Group, 2023.
7. Reviewer for *Journal on Migration and Human Security*, *Journal of Asian and African Studies*, *Korea Observer*, *Korean Party Studies Review*, *Comparative Democratic Studies*, *Journal of Korean Data Analysis Society*, *Korean Journal of Legislative Studies*, *Social Science Review*, *Journal of Global Politics*.
6. Research Service, Local Government Evaluation Research & Writing Reports, The Hankook Ilbo, 2022.
5. Judge, 2nd Public Complaints Data Analysis Contest, The Korean Anti-Corruption and Civil Rights Commission, 2022.
4. Discussant, Panel on Peace Index Study Using Big Data, Summer Conference of The Korean Association of International Studies, 2022.
3. Judge, Spring Undergraduate Research Festivals, Iowa Center for Research by Undergraduates, 2019.
2. Discussant, Panel on Governance and Public Administration, Midwest Political Science Association, 2019.
1. Republic of Korea Army (ROK Army)
Sergeant (OR-5), Reserve (2013.12–Present), Active Duty (2012.03–2013.12)

Professional Affiliation

Member of The Korean Political Science Association
Member of The Korean Association of International Studies
Member of American Political science Association
Member of Midwest Political Science Association
Member of Southern Political Science Association
Member of ISA-Midwest
Member of The Korean Association for Information Society
Member of The Korean Data Analysis Society

Skills

Analysis & Programming: STATA, Python, R, SPSS
Application: Markdown, Git (GitHub)
Language: English (Fluent), Korean (Native)

References

Frederick Solt
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