Contact
Information

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RESEARCH INTERESTS

Measuring the dynamics of public opinion for effective policy communication.

- My interests are focused on communication gaps at the intersection of **political** and **science communication**. I examine how public opinion diverges from policy actors' (political elites or scientific experts) views and the resulting unintended outcomes, regarding *public health and election issues*.
- My research employs statistical methods to adjust for biases and measurement error in observational data, including survey and text data. I am also interested in simulation experiments with applications to social and environmental research.

EDUCATION

Yonsei University, Seoul, South Korea

M.A. Statistics and Data Science (GPA: 4.13/4.3)

Feb 2022

- Thesis Topic: Measurement Error in Spatio-Temporal Outcomes
- Advisor: Professor Sangwook Kang

B.A. Communication, Applied Statistics (GPA: 4.22/4.3)

Feb 2020

• Summa Cum Laude, Graduated with Highest Honors

REFEREED JOURNAL PUBLICATIONS

- [1] **Park, R.** & Baek, Y. M. (2021). Talking alternatively what would happen versus talking straightly what happened: Tracking Congressional speech during the COVID-19 pandemic. *Journal of Social and Political Psychology*, 9(2), XX-XX. https://doi.org/10.5964/jspp.6153 [DOI NEED TO BE ASSIGNED]
- [2] Park, R. & Baek, Y. M. (2021). Trends in survey response rates during election periods in South Korea: Two-phases of survey response model and survey modes. *Journal of Communication Research, 58(3), 5-45. https://doi.org/10.22174/ jcr.2021.58.3.5.
- [3] Park, R. & Baek, Y. M. (2020). Early voting and the citizens' change in vote choice in Korean legislative elections: An ecological inference (EI) approach. *Korean Party Studies Review, 19(3), 39-73. https://doi.org/10.30992/KPSR. 2020.09.19.3.39

(*: Journals in Korean)

Books

- [4] Baek, Y. M. & **Park**, **R**. (forthcoming). Complex survey data analysis using R. Seoul: Hannarae Publishing Co.
- [5] Baek, Y. M. & Park, R. (2021). Missing data analysis using R: Maximum likelihood and multiple imputation. Seoul: Hannarae Publishing Co.
- [6] Baek, Y. M. & Park, R. (2021). Propensity score analysis using R: Causal inference based on the Rubin's causal model. Seoul: Hannarae Publishing Co.

Works In Progress

- [7] **Park, R.** & Kang, S. A measurement error approach for satellite-based air quality modeling: Using GEMS-retrieved nitrogen dioxide (NO₂) products.
 - Best paper award: Presented at the BK21 Conference for Statistics and Data Science, Yonsei University, Seoul, South Korea, October 15, 2021.

- [8] Park, R. & Song, H. We don't need THAT vaccine: An agent-based modeling of vaccine uptake and resistance with two vaccines.
 - Presented at the World Congress for Korean Politics and Society 2021, Seoul, South Korea, August 18-20, 2021.
- [9] **Park**, **R.** & Baek, Y. M. Evaluating the effectiveness of parental mediation on children's media use: Propensity score matching with complex survey data.
 - Presented at 6th Annual Korea Press Foundation Conference Using the KPF Media Statistics Data, Seoul, South Korea, November 27, 2021.

RESEARCH EXPERIENCES

National Institute of Environmental Research (NIER)

(Supervisor: Professor Sangwook Kang)

Research Assistant

Apr 2020 - Dec 2021

- Developed geostatistical algorithms for **GEMS**, satellite-based air quality data, and conducted simulation studies using kriging and Gaussian random fields
- Managed a Linux-based RStudio server for computing over 1TB of data
- Appointed by Professor Kang to lead the team of 7 research assistants in 2021

Korea Press Foundation (KPF)

(Supervisor: Professor Young Min Baek)

Researcher

Jul 2021 - Sep 2021

• Examined the effects of parental mediation on children's media use employing causal inference methods in the *Child and Media Korea 2020* survey

Ministry of Foreign Affairs (MOFA), Republic of Korea

(Supervisor: Professor Young Min Baek)

Research Assistant

Apr 2020 - Aug 2020

• Tracked topic changes over two decades in the US elite discourse (Congressional records and NYT/WP's news articles) toward the Korean peninsula

Gwangju National University of Education

(Supervisor: Professor Young Min Baek)

Researcher

Mar 2020 - Apr 2020

• Built an interactive web application for Korean text analytics using R Shiny

NAVER News Algorithm Review Board

(Supervisor: Professor Kyungmo Kim)

 $Under graduate\ Research\ Assistant$

Feb 2017 - May 2017

• Collected news articles about the 2017 South Korean presidential election to assess the political neutrality of NAVER's news selection and placement algorithms

TEACHING EXPERIENCES

Department of Applied Statistics, Yonsei University

(Lecturer: Professor Sangwook Kang)

Teaching Assistant

Fall 2020 - Spring 2021

- STA3123: Survey Sampling, Spring 2021 (Taught in English, SAS software)
- STA3108: Survival Analysis, Fall 2020 (Taught in English, R software)

Internship NAVER Corporation, Seongnam, South Korea

Research Intern Jan 2020 - Feb 2020

• Proposed a novel approach to visualize the evolution of buzzwords at Data Lab

Leadership Yonsei Big Data Club (YBIGTA)

(Advisor: Professor Won Suk Lee)

13th Vice President

Jul 2018 - Jun 2019

 Managed the 60-member club's weekly sessions and semestral conference on data science topics from ML/AI to cloud computing in the Dept. of Computer Science

Honors and Awards Yonsei University

Best Paper Award, BK21 Conference for Statistics and Data Science
Graduated with Highest Honors (Top 1% of the graduating class)
Feb 2020

• Excellence Prize, Embrain Panel Big Data Competition

May 2019

NAVER Corporation

• Excellence Prize, Data Science Competition 2019

Aug 2019

SCHOLARSHIPS

National Research Foundation of Korea (NRF)

• Brain Korea 21 (BK21) Scholarship (\$600 per month)

2020 - 2021

Yonsei University

Bachelor's-Master's Bridge Program Scholarship (full tuition)
Honors Scholarship (7 consecutive semesters)
2020 - 2021
2016 - 2019

Samsung Foundation

• Samsung Dream Class Scholarship

Summer 2017

TECHNICAL STRENGTHS Programming / Markup Cloud Computing / OS

R, Python, SAS, NetLogo / LATEX, HTML, CSS GCP, AWS, Docker / Windows, Linux, macOS

References

Professor Sangwook Kang (kanggil@yonsei.ac.kr)

• Associate Professor, Department of Statistics and Data Science, Yonsei University

Professor Young Min Baek (ymbaek@yonsei.ac.kr)

• Associate Professor, Department of Communication, Yonsei University

Professor Hyunjin Song (hyunjinsong@yonsei.ac.kr)

• Assistant Professor, Department of Communication, Yonsei University

Professor Jongho Im (ijh38@yonsei.ac.kr)

• Associate Professor, Department of Statistics and Data Science, Yonsei University

Professor Hakbae Lee (hblee@yonsei.ac.kr)

• Professor, Department of Statistics and Data Science, Yonsei University

More Information Supplementary materials can be found at my website, https://rinseo.github.io. The online version of this document contains active hyperlinks.

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