

Ph.D. STUDENT · QUANTITATIVE METHODS IN PSYCHOLOGY

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Education_

Cornell University

NewYork, U.S.

Ph.D. STUDENT IN HUMAN DEVELOPMENT

08. 2023 - recently

- Major in Developmental Psychology
- Advisor: Dr. Felix Thoemmes
- Related courses: Quantitative methods 1 & 2, Probability model and inference, Studying social inequality with data science

Seoul National University

Seoul, Republic of Korea

03. 2020 - 02. 2022

MA IN EDUCATION

- Major in Educational Measurement and Evaluation
- Advisor: Dr. Sun-Geun Baek
- GPA: 4.3/4.3
- Dean's list for every semester(four times)
- Master's thesis title: The effect of self-directedness on college adjustment through academic resilience
- Related courses: Causal inference, Item response theory, Advanced statistical method for educational research, HLM, SEM

Ewha Womans University

Seoul, Republic of Korea 03. 2016 - 02. 2020

BA IN EDUCATION AND PSYCHOLOGY

- Major in Education and Psychology
- Undergrad Research Advisor: Dr. Kyoung-Hye Seo
- GPA: 4.13/4.3 Summa cum laude
- Dean's list for every semester(eight times)

Research Interests _____

CAUSAL INFERENCE

instrumental variable; causal mediation analysis; causal graphical model; sensitivity analysis

STRUCTURAL EQUATION MODEL

latent class analysis; fator analysis

Professional Experience _____

Senior Researcher, The Korea Chamber of Commerce and Industry

- Developed National Competency Standard test items for vocational high school students
- 08. 2022 • Used Rasch model to analyze the test result
- 03. 2023 Equated tests using the bookmark method
 - Wrote policy reports for vocational education and the way to evaluate students' competencies
 - Conferred about upcoming test formula with the Ministry of Education
 - Revised the test reflecting the changed national education curriculum

Researcher, Korea Institute for Research in the Behavioral Sciences

- Developed competency and morality test items
 Revised and updated norms of tests
- 07. 2022 Provided savvy and individualized feedback to test takers
 - Analyzed personality profile based on CPI test scale
 - Calculated predictive validity and provided it to test taker firms

Researcher. Brain Korea 21, Department of Education, Seoul National University

09. 2021 -

• Analyzed current academic resilience competency of undergraduate school students by using scales

01. 2022

- Assisted advisor in developing and validating scales
- Completed educational methodology workshops

Researcher, Jeju Province

01. 2021 -

• Proposed a new educational welfare policy for lower-income families

05. 2021

- Set criteria for welfare beneficiaries
- Attended meetings for educational welfare budget adjustment
- Wrote policy reports

Research Assistant, Chungnam National University

01. 2021 -

- Conducted Focus Group Interviews
- 03. 2021
- Developed Science Experts' Competency Items in situational judgement test form
- · Analyzed previous studies

Publications _____

PUBLISHED

Baek, S. G., **Kim, J**(corresponding author), & Park, H. 2021. Development and validation of the academic resilience scale for undergraduate students using scenario method. The SNU Journal of Education Research, 30(3), 29-57.

In Review

- Kim, J., Baek, J. W., Lee, H. S(co-first author)., & Choi, Y. J(second author). Development and Validation of the Teacher Competency Diagnostic Scale in Online Learning Environment for Preservice Teacher Using Scenario Method
 - ► Have done focus group interviews with both pre-service teachers and in-service teachers
 - ► Surveyed 600 pre-service teachers to prove validity
 - ► Conducted confirmatory factor analysis

In Progress

Kim, J., & Thoemmes, F, J. Causal Assumptions for Two-Wave Longitudinal Mediation Analysis

► Confirm existing assumptions for two-wave longitudinal mediation using causal graphical model

Kim, J., Thoemmes, F, J., & Ong, A. Systematic Literature Review for Mediation Analysis

- ► Systematically analyze current trends of conducting mediation analysis
- ► Suggest appropriate ways for mediation analysis
- ►OSF link: osf.io/w64xn

Kim, J.& Kim, Y. Statistical Evidence of Sex Discrimination Using Instrumental Inequality

- ▶Defined the notion of discrimination using DAG
- ▶ Proved whether there is statistical evidence of discrimination utilizing instrumental variable on a discrimination case

Kim, Y. & Kim, J. Causal Interpretation of Algorithmic Fairness

▶ Defined the notion of existing algorithmic fairness measurement methods using DAG

Presentations_

ORAL PRESENTATIONS

*Kim, Y., & **Kim, J**. 2022. Statistical Evidence for Inequality: Applying Causal Restriction of Instrumental Variable. Oral Presentation: Korea Inequality Research Network Conference, Seoul, Korea.

POSTER PRESENTATIONS

^{*} presenting author

- *Kim, J., & Kim, Y. 2024. Credible Evidence of Gender Discrimination Using Instrumental Inequality. Poster: 2024 American Causal Inference Conference (ACIC). Seattle, U.S. (Upcoming)
- *Kim, J. 2022. Table 2 Fallacy in Latent Class Analysis. Poster: 22nd International Conference on Educational Research (ICER). Seoul, Korea.
- Baek, J., *Kim, J., Lee, H., Choi, Y.& Kim, S. 2022. Pre-Service Teachers' Experiences and Perceptions of Teacher Preparation Programs: How Are Teachers Educated to Teach Virtually?. Poster: 22nd International Conference on Education Research (ICER). Seoul, Korea.
- *Kim, J., & Park, H. 2022. Measurement and Analysis of S University students' academic resilience. Online Poster: SNU BK21 Seminar
- *Kim, J., Nam, C., & Seo, Y. 2017. A Narrative Exploration of the EBS Internet Lecture Experience of Low-Income High School Students. Poster: Korea Educational Research Society, Daejeon, Korea.

Awards, F	ellowships, & Grants		
2024	Appenzeller Memorial Fellowship, Ewha Foundation	3,000\$	
2023	Sage Fellowship, Cornell University	64,186\$	
2021	Scholarship, Korea Association of University Women Excellence RA Award, Seoul National University Gwanak Residence Hall		
2020	Kang's Grant, Kang's institution		
2019, 2020	Career Building Scholarship, Ewha Womans University		
2019	Liberal Effective Artistic Practice Project Grant, Ewha Womans University		
2018, 2019	Humanities 100 Years Scholarship, Korea Student Aid Foundation		
2017, 2018	Wonju Talent Development Award, Wonju Province		
2016	Hyundai Motor Hope Scholarship, Hyundai Foundation		
Mentoring			
June 2024 -August 2024	Harvard Summer Student Research Program, Research Mentor		
	 Democratize access to research for underprivileged students around the globe Help students find research questions Guide students to learn causal inference using literature that a mentor chose 	Harvard University	
	Gwanak Residence Hall, Resident Advisor		
June 2020 -Dec 2021	 Advised undergraduate students to well adapt in college Prepared Gwanak residence hall festival Assisted students who got Covid-19 Advised international students to overcome psychological problems 	Seoul National Univ	
Spring 2016 -Fall 2016	 Planned an individualized career development program Assisted a child of traffic accident victims in overcoming academic difficulties Provided a child of traffic accident victims opportunities to meet one's role model 	Hyundai Motor	

Teaching Experience_

Fall 2024	Causal Mediation Analysis (Upcoming), Teaching Assistant • Assist students in utilizing R program	GESIS Workshop Series
Spring 2021	Multiple Regression Course: Center of Teaching and Learning, Teaching Assistant • Assisted students in utilizing R program • Provided appropriate supplementary material for each student	Seoul National Univ
Spring 2019	 Moral education, Practicing Teacher Mentored middle school students Taught students ethics using flipped learning 	Sahmyook middle school
Spring 2017 - Fall 2018	 Math, Afterschool Teacher Taught low-income students mathematics Delivered students a special lecture about career and college life 	Samsung Dream Class
Spring 2018	 Korean for North Korean Defectors, Afterschool Teacher Taught North Korean defector students Korean to take the Korean Fluency test Advised a delinquent student as a classroom teacher Planned a special career lecture with experts from diverse fields 	Yeomyeng school
Spring 2017	English, Afterschool TeacherTaught low-income students English	Doksan high school
Fall 2016	Korean as Second Language, Tutor • Taught a multicultural student Korean	Korea Student Aid Foundation

Outreach & Professional Development _____

STATISTICAL LANGUAGE

► R, SPSS, Amos

LANGUAGE

➤ Native: Korean

► Fluent: English

LICENSURE

► Teacher's Certificate for the Secondary School Teacher of Moral Education, Ministry of Education, Republic of Korea.

EXTRA CURRICULAR ACTIVITIES

- ► Curriculum Developing Club(2018-2019)
- ➤ Student Council in Ewha Womans University(2016-2018)
- ► Leader of Educational Academic Society in Ewha Womans University(2016-2017)