

SEOHYUN (SONIA) KIM, PHD

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700-B 2nd St NE, 5th Floor
Washington, DC 20002

EDUCATION

PhD	Quantitative Methodology, University of Georgia Dissertation: Constructed response data analysis using structural equation modeling and topic modeling Advisors: Zhenqiu Lu & Allan S. Cohen	2019
MS	Statistics, Seoul National University Thesis: Multilevel modeling using ridge regression Advisor: Hee-Seok Oh	2013
BS	Mathematics Education, Chonnam National University	2008

EMPLOYMENT

Kaiser Permanente, Mid-Atlantic Permanente Research Institute Research Biostatistician II Research Biostatistician I	Jul. 2024 – present Jul. 2021 – Jul. 2024
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University of Virginia, Department of Psychology Postdoctoral Research Associate	Oct. 2019 – Jul. 2021
<ul style="list-style-type: none">Conducted studies using various quantitative methods to discover underlying patterns in social and behavioral science data.Developed robust approaches for growth mixture modeling using quantile regression.	

RESEARCH INTERESTS

Causal inference, Vaccine safety, Predictive modeling, Longitudinal data analysis, Mixture modeling, Bayesian analysis, Topic modeling, Data visualization

HONORS AND AWARDS

Brenda H. Loyd Outstanding Dissertation Award , <i>National Council on Measurement in Education (NCME)</i>	2020
Quantitative Methodology Outstanding Scholar Award , <i>University of Georgia</i>	2019
Owen Scott Emerging Scholar Award , <i>University of Georgia</i>	2018

Finalist for Harold Gulliksen Psychometric Research Fellowship, *Educational Testing Service* 2017

Foreign Travel Award, *University of Georgia* 2015 & 2017

AERA Division D In-Progress Research Gala, Top 9 Proposals 2016

- Research title: A mixture partial credit model analysis using language-based covariates

GRANT AND RESEARCH EXPERIENCE

Links of Sleep-Disordered Breathing with Dementia Risk and Healthcare Utilization: Investigating Differences by Race, Sex, and CPAP Adherence

Sponsor: Kaiser Permanente/Johns Hopkins University Collaboration; 05/01/2025 – 04/30/2026; Role: Biostatistician

The overall objective of this study is to determine SDB diagnosis and subsequent development of mild cognitive impairment and dementia in the KP EHR and replicate these findings in the Johns Hopkins Health System EHR.

Disparities in the Treatment of Fuchs' Endothelial Corneal Dystrophy: A Pilot Study

Sponsor: Kaiser Permanente/Johns Hopkins University Collaboration; 05/01/2024 – 04/30/2025; Role: Biostatistician

The overall objective of this study is to assess the existence of disparities in access to care and surgical intervention among patients with Fuchs' endothelial corneal dystrophy based on sex, race, and ethnicity.

North American AIDS Cohorts Collaboration on Research and Design (NA-ACCORD)

Sponsor: Johns Hopkins University/National Institute of Allergy and Infectious Disease; 5/1/2024 – 4/30/2025; Role: Biostatistician

The aims of this project are to (1) compare the incidence and varying conditions of post-acute sequelae of COVID-19 (PASC), by HIV status and healthcare system type (integrated vs. non-integrated); and (2) ascertain the incidence of cardiac dysrhythmias, type 2 diabetes mellitus, and neurologic conditions in PASC, by HIV status and health care system type.

Service Utilization for Rehabilitation after Various Firearm Injuries Using Outpatient Visits & Pharmaceutical Encounters

Sponsor: Health Alliance for Violence Intervention (HAVI) and the Kaiser Permanente Center for Gun Violence Research and Education; 11/1/2023 – 10/31/2025; Role: Biostatistician

The overall objective of this study is to conduct a retrospective cohort study using KPMAS EHR data to describe the medical and mental health utilization of nonfatal firearm injury survivors.

Vaccine Safety Datalink Infrastructure Task

Sponsor: Centers for Disease Control and Prevention, 09/28/2023 – 09/27/2027; Role: Biostatistician

The primary objective is to collaborate with CDC to implement a common data model within KPMAS that allows us to jointly conduct vaccine safety surveillance, looking at the association between vaccines and health status and outcomes, including adverse events, across our patient population.

Reaching at-risk populations: Evaluating EHR tools and outreach to promote genetic counseling uptake

Sponsor: National Institutes of Health; 09/10/2022 – 12/31/2023; Role: Biostatistician

The aims of this project are to (1) evaluate the reach, effectiveness, adoption, and implementation of the OB/GYN based genetics referral alert among a) adults with family history of ovarian, breast, and/or bowel cancer and b) OB/GYN providers; and (2) evaluate the effectiveness of further outreach to at-risk relatives who received the genetics referral alert but declined the genetics referral or accepted the referral but never completed the genetics visit.

Clinical consequences of delays in referral for treatment of severe symptomatic aortic stenosis stratified by race, ethnicity, and socioeconomic status: the TAVR delay study

Sponsor: Edwards Lifesciences; 01/01/2022 – 12/31/2023; Role: Biostatistician

The aim of this project is to determine clinical consequences of delayed referral for treatment of severe symptomatic aortic stenosis.

Understanding and addressing disparities in vaccination rates among black members

Sponsor: Garfield Memorial Fund, 2021/10/01 – 07/31/2023; Role: Biostatistician

The aims of this project are to (1) use innovative methods to better characterize sources of racial disparities in vaccination rates, (2) survey members to better understand factors contributing to vaccine hesitancy, and (3) explore how prior patterns of vaccination predict COVID-19 vaccine uptake.

Development, validation, and testing of an interoperable predictive model to estimate inadequate health literacy

Sponsor: Kaiser Permanente/Johns Hopkins University Collaboration; 04/01/2021 – 03/01/2022; Role: Biostatistician

The aims of this project are to (1) utilize responses to previously collected health literacy screening questions from a large database (the KP Research Bank (KPRB)) and universally collected demographic and clinical information from the Epic-based KP HealthConnect (KPHC) to develop and validate a predictive model for health literacy; and (2) export and test the interoperability of the predictive model using data from the Epic-based Johns Hopkins Medicine and Health System.

4-VA Collaborative Grants, Commonwealth of Virginia: Longitudinal Structural Equation Modeling for Incomplete Proportion Data in Obesity Research.

Postdoctoral Research Associate

2020

- Constructed cross-domain growth curve models to investigate the longitudinal relationship between body mass index and body fat percentage measurements.

Office of the Vice President for Research, University of Virginia - 3 Cavaliers Grant: Accelerating the Transition to Healthy and Sustainable Food by Appealing to the Senses.

Postdoctoral Research Associate

Oct. 2019 – Dec. 2019

- Conducted quantitative data analysis using various quantitative methods including growth curve modeling, structural equation modeling, and cluster analysis to discover patterns in customer transaction data.

NSF funded grant: Usable Measures of Teacher Understanding: Exploring Diagnostic Models and Topic Analysis as Tools for Assessing Proportional Reasoning for Teaching (NSF DRK-12). Award No. 1813760.

Graduate Research Assistant 2018 - 2019

- Investigated topic modeling approaches for analyzing teachers' interview data

Georgia Center for Assessment

Graduate Research Assistant 2017 - 2019

- Conducted data analysis using topic models to find latent themes in students' written responses
- Conducted simulation study using a supervised topic model to predict students' feedback

American Institute of Certified Public Accountants (AICPA)

Psychometric Intern Summer 2016

- Investigated the reliability of CPA tests
- Conducted a mixture IRT analysis to detect latent groups from examinees' item responses

NSF funded grant: Language-Rich Inquiry Science with English Language Learners through Biotechnology (NSF DRK-12). Award No. 1316398.

Graduate Research Assistant 2013 - 2018

- Analyzed student text responses using topic modeling
- Conducted longitudinal data analysis using hierarchical linear modeling
- Investigated latent structures of student response data using structural equation modeling
- Participated in writing a grant proposal
- Participated in project activities, including test administration for data collection, student summer academies, teacher training workshops, and family workshops

PUBLICATIONS

Jacobs, J., **Kim, S.**, Sheu, Y.-S., Chesbrough, K., Bishop, C., & Weinfield, N. S. (2026). Trends in the incidence of pediatric type 1 diabetes, type 2 diabetes, and prediabetes through the COVID-19 Pandemic. *Public Health Reports*. <https://doi.org/10.1177/00333549251403376>

Donahue, J. G., Cocoros, N. M., ... **Kim, S.**, ... & Belongia, E. A. (2025). Near real-time surveillance and tree-based data mining to assess the safety of respiratory syncytial virus vaccines in older adults in the vaccine safety datalink. *Vaccine*, 67. <https://doi.org/10.1016/j.vaccine.2025.127873>

Wenk, K. S., Wu, X., Sheu, Y.-S., **Kim, S.**, & Miller, M. J. (2025). Methotrexate test dose use and frequency of laboratory abnormalities in patients initiating treatment. *Journal of Drugs in Dermatology*, 24(11), 1132-1137. <https://doi.org/10.36849/JDD.9107>

Jacobs, J. B., Hu, H., **Kim, S.**, Sheu, Y.-S., Bishop, R. C., Chesbrough, K., & Weinfield, N. S. (2025). Risk factors for development of type 2 and prediabetes in children during the COVID-19 pandemic. *Pediatric Obesity*. <https://doi.org/10.1111/ijpo.70070>

Kim, S., Lu, Z., Cohen, A. (2024) Exploring examinees' responses to constructed response items with a supervised topic model. *British Journal of Mathematical and Statistical Psychology*. <https://doi.org/10.1111/bmsp.12319>

- Tong, X., **Kim, S.**, Bandyopadhyay, D., & Sun, S. (2023) Association between body fat and body mass index from incomplete longitudinal proportion data: Findings from the Fels study. *Journal of Data Science*. <https://doi.org/10.6339/23-JDS1104>
- Burrell, T.D., Sheu, Y.-S., **Kim, S.**, Mohadikar, K., Ortiz, N., Jonas, C., & Horberg, M. (2023) COVID-19 and adolescent outpatient mental health service utilization: an interrupted time series analysis. *Academic Pediatrics*. <https://doi.org/10.1016/j.acap.2023.05.016>
- Burrell, T. D., **Kim, S.**, Mohadikar, K., Jonas, C., Ortiz, N., & Horberg, M. A. (2023). Family structure and adolescent mental health service utilization during the COVID-19 pandemic. *Journal of Adolescent Health*. <https://doi.org/10.1016/j.jadohealth.2023.01.018>
- Horberg, M. A., Watson, E., Bhatia, M., Jefferson, C., Certa, J. M., **Kim, S.**, ... & Moore, R. (2022). Post-acute sequelae of SARS-CoV-2 with clinical condition definitions and comparison in a matched cohort. *Nature communications*, 13(1), 5822. <https://doi.org/10.1038/s41467-022-33573-6>
- Golino, H., Christensen, A. P., Moulder, R., **Kim, S.**, & Boker, S. M. (2022). Modeling latent topics in social media using Dynamic Exploratory Graph Analysis: The case of the right-wing and left-wing trolls in the 2016 US elections. *Psychometrika*, 87(1), 156-187. <https://doi.org/10.1007/s11336-021-09820-y>
- Kim, S.**, Tong, X., Zhou, J., & Boichuk, J. P. (2021). Bayesian growth curve modeling using conditional medians. *Behavior Research Methods*. <https://doi.org/10.3758/s13428-021-01655-w>
- Kim, S.** & Tong, X. & Ke, Z. (2021). Exploring class enumeration in growth mixture modeling based on conditional medians. *Frontiers in Education*. 6:624149. <https://doi.org/10.3389/educ.2021.624149>
- Choi, H.-J., **Kim, S.**, Cohen, A, Templin, J., & Copur-Gencturk, C. (2021). Integrating a statistical topic model and a diagnostic classification model for analyzing items in mixed format assessment. *Frontiers in Psychology*. 11:579199. <https://doi.org/10.3389/fpsyg.2020.579199>
- Kim, S.**, Lu, Z., & Cohen, A. (2020). Reliability for tests with items having different numbers of ordered categories. *Applied Psychological Measurement*, 44(2), 137-149. <https://doi.org/10.1177/0146621619835498>
- Cardozo-Gaibisso, L., **Kim, S.**, Buxton, C., & Cohen, A. (2019). Thinking beyond the score: multidimensional analysis of student performance to inform the next generation of science assessment. *Journal of Research Science in Teaching*. <https://doi.org/10.1002/tea.21611>
- Kim, S.**, Lu, Z., & Cohen, A. (2018). An improved estimation using Polya-Gamma augmentation for Bayesian structural equation models with dichotomous variables. *Measurement: Interdisciplinary Research and Perspectives*, 16(2), 81-91.
- Choi, Y., **Kim, S.**, Cohen, A., & Lu, Z. (2018). The impact of equating on detection of treatment effects. *Journal of Modern Applied Statistical Methods*, 17(2), eP2673. doi: [10.22237/jmasm/1559653467](https://doi.org/10.22237/jmasm/1559653467)
- Kim, S.**, Kwak, M., Cardozo-Gaibisso, L., Buxton, C., & Cohen, A. (2017). Statistical and qualitative analyses of students' answers to a constructed response test of science inquiry of knowledge. *Journal of Writing Analytics*, 1, 82-102.

- Buxton, C., Alleksaht-Snider, M., Aghasaleh, R., Kayumova, S., **Kim, S.**, Choi, Y., & Cohen, A. (2014). Potential benefits of bilingual constructed response science assessments for understanding bilingual learners' emergent use of language of scientific investigation practices. *Double Helix*, 2, 1-21.
- Shin, S. & **Kim, S.** (2012). Effects of ability grouping on students' attitudes toward Korean and English. *Language research*, 48(3), 693-714.

Proceedings

- Tong, X., **Kim, S.**, & Ke, Z. (2022). Impact of Likelihoods on Class Enumeration in Bayesian Growth Mixture Modeling. In: Wiberg, M., Molenaar, D., González, J., Kim, JS., Hwang, H. (Eds) *Quantitative Psychology: The 86th Annual Meeting of the Psychometric Society*, Virtual, 2021. Springer Proceedings in Mathematics & Statistics, vol 393. Springer, 111-120.
https://doi.org/10.1007/978-3-031-04572-1_9
- Xiong, J., Choi, H.-J., **Kim, S.**, Kwak, M., & Cohen, A. (2020). Topic modeling of constructed-response answers on social study assessments. In Wiberg, M., Molenaar, D., González, J., Bockenholt, U., Kim, J.-S. (Eds.) *Quantitative Psychology: The 84th Annual Meeting of the Psychometric Society*, Santiago, Chile, 2019, Vol 322. New York: Springer, 263-274.
- Choi, H.-J., Kwak, M., **Kim, S.**, Xiong, J., Cohen, A., & Bottge, B. (2019). An application of a topic model to two educational assessments. In Wiberg, M., Culpepper, S., Janssen, R., González, J., & Molenaar, D. (Eds.) *Quantitative Psychology: The 83rd Annual Meeting of the Psychometric Society*, New York, NY, 2018, Vol 265. New York: Springer, 449-459.
- Kim, S.**, Kwak, M., & Cohen, A. (2017). A mixture partial credit model analysis using language-based covariates. In van der Ark, L.A., Culpepper, S., Douglas, J.A., wang, W.-C., & Wiberg, M. (Eds.) *Quantitative Psychology: The 81st Annual Meeting of the Psychometric Society*, Asheville, North Carolina, 2016, Vol 196. New York: Springer, 321-333.
- Zheng, G., **Kim, S.**, Tan, Y., & Galyardt, A. (2016). Soft clustering of physics misconceptions using a mixed membership model. *Proceedings for the 9th International Conference on Educational Data Mining*. Ed. By T. Barnes, M. Chi and M. Feng. Raleigh, North Carolina.

PRESENTATIONS

- Oseji, T. D., Paul, A. M., **Kim, S.**, Jefferson, C. R., & Weinfield, N. S. (2025, November). Outpatient healthcare utilization of nonfatal firearm injury survivors in an integrated care model. American Public Health Association 2025 Annual Meeting and Exposition, Washington, DC.
- Yih, W. K., Duffy, J., Daley, M. F., Fireman, B., **Kim, S.**, Klein, N., McClure, D., Qian, L., Smith, N., Stein, A., Vazquez-Benitez, G., Weintraub, E., Xu, S., Zhu, J., & Maro, J. (2025, August). Using tree-based scan statistics to assess vaccines for possible associations with Guillain-Barre Syndrome in the Vaccine Safety Datalink, 2017-2023. 41st Annual Meeting of International Society for Pharmacoepidemiology, Washington, DC.

- Vupputuri, S., **Kim, S.**, Jefferson, C., Dumitriu, B., & Howards, P. (2024, December). Association of neighborhood-level socioeconomic deprivation with mortality among patients with sickle cell disease. 66th Annual American Society of Hematology Annual Meeting and Exposition, San Diego, CA.
- Jacobs, J., Sheu, Y.-S., **Kim, S.**, Chesbrough, K., Bishop, R. C., & Weinfield, N. (2024, October). Risk factors for development of Type 2 and prediabetes in children and youth during the COVID-19 pandemic. American Public Health Association 2024 Annual Meeting and Exposition, Minneapolis, MN.
- Miller, M., Jefferson, C., Eberhart, L., **Kim, S.**, & Hoberg, M. (2024, June). Modeling longitudinal trajectories of antiretroviral medication adherence and composite medication adherence for non-HIV chronic conditions in people with HIV. 19th International Conference on HIV treatment and prevention adherence. Puerto Rico.
- Miller, M., Jefferson, C., Eberhart, L., **Kim, S.**, & Hoberg, M. (2024, June). The association between antiretroviral medication adherence and composite medication adherence for non-HIV chronic conditions in people with HIV. 19th International Conference on HIV treatment and prevention adherence. Puerto Rico.
- Hoberg, M., Jefferson, C., Watson, E., Fathi, L., **Kim, S.**, Gebo, K., Hogan, B., Humes, E., & Althoff, K. (2024, March). Effects of HIV status on incidence of post-COVID conditions in people with SARS-CoV-2 (COVID-19). Conference on Retroviruses and Opportunistic Infections. Denver, CO.
- Hoberg, M., Jefferson, C., Watson, E., Fathi, L., **Kim, S.**, Gebo, K., Hogan, B., Humes, E., & Althoff, K. (2024, March). Evaluating the effect of vaccination on post-COVID conditions among patients with and without HIV. Conference on Retroviruses and Opportunistic Infections. Denver, CO.
- Galper, B. Z., **Kim, S.**, Heliste, J., Whitacre, M., Basra, S., Eberhart, L., & Berry, N. C. (2023, October). Mapping out the journey to TAVR in a large integrated health system: rates and clinical consequences of delays in referral of severe aortic stenosis patients to the structural heart team. Transcatheter Cardiovascular Therapeutics Conference 2023, San Francisco, CA.
- Vupputuri, S., **Kim, S.**, Clennin, M.N., Cromwell, L., & Daugherty, S.L. (2023, June). The contribution of social risks to racial differences in Type 2 diabetes. American Diabetes Association 83rd Scientific Sessions, San Diego, CA.
- Vupputuri, S., **Kim, S.**, Cromwell, L., Gander, J., Roblin, D. W., Clennin, M. N., & Daugherty, S. L. (2023, February). The contribution of social risk to racial differences in hypertension. The annual Health Care Systems Research Network Conference, Denver, CO.
- McCracken, C., McDonald, B., **Kim, S.**, Davis, T., Weinfield, N., Basra, S., Wilson, K., Barrie, I., Heliste, J., & Wright, M. (2023, February). Decomposing racial disparities in flu vaccination rates from 2016-2021. The annual Health Care Systems Research Network Conference, Denver, CO.

- Heliste, J., McCracken, C. E., Barrie, I. S., Basra, S. S., Davis, T. L., **Kim, S.**, Henninger, M. L., McDonald, B., Write, M. E., & Weinfield, N. S. (2023, February). Exploring racial disparities in required and non-required vaccines for adolescents. The annual Health Care Systems Research Network Conference, Denver, CO.
- Sznajder, K., Jefferson, C.R., **Kim, S.**, & Weinfield, N.S. (2022, December). Contraceptive use by females with chronic medical conditions in a large integrated healthcare system. Society of Family Planning, Annual Meeting, Baltimore, MD.
- Burrell, T., Chesbrough, K., Jonas, C., Horberg, M., **Kim, S.**, Sheu, Y., Mohadikar, K., & Ortiz, N. (2022, October). Predictors of adolescent outpatient mental health service utilization during the COVID-19 pandemic. American Academy of Pediatrics 2022 National Conference & Exhibition, Anaheim CA.
- Galper, B., Whiting, T., Heliste, J., Whitacre, M., **Kim, S.**, & Berry, N. (2022, September) Structural heart team referral rates for severe aortic stenosis by gender, ethnicity and socioeconomic status in a large integrated system. Transcatheter Cardiovascular Therapeutics Conference 2022, Boston MA.
- Sznajder, K., Jefferson, C. R., **Kim, S.**, & Weinfield, N. S. (2022, May). Characteristics and outcomes associated with COVID-19 infection in pregnancy. 2022 American Congress of Obstetricians and Gynecologists Annual Clinical & Scientific Meeting, San Diego, CA.
- Miller, M. J., Deneal, A., Jonas, C., **Kim, S.**, & Gallo, J. (2022, April). *Evolving model paradigms for predicting health literacy*. The annual Health Care Systems Research Network Conference, Pasadena, CA.
- Tong, X., **Kim, S.**, & Ke, Z. (2021, July). *The impact of likelihoods and outliers on Bayesian model selection*. Paper presented at the International Meeting of the Psychometric Society.
- Kim, S.** & Tong, X. (2020, July). *Bayesian growth mixture modeling using conditional medians*. Paper presented at the International Meeting of the Psychometric Society.
- Cardozo-Gaibiso, L., **Kim, S.**, Buxton, C., & Cohen, A. (2019, July). *Thinking beyond the score with SFL and text analysis: multidimensional analysis of student assessment performance*. Paper presented at the 46th International Systemic Functional Congress, Santiago, Chile.
- Xiong, J., Choi, H.-J., **Kim, S.**, Kwak, M., & Cohen, A. (2019, July). *Topic modeling of constructed-response answers on social study assessments*. Poster at the International Meeting of the Psychometric Society, Santiago, Chile.
- Kim, S.**, Lu, Z., & Cohen, A. (2019, Apr.). *Longitudinal data analysis for text data*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Kwak, M., **Kim, S.**, Xiong, J., Choi, H.-J., & Cohen, A. (2019, Apr.). *Stopword Selection for Latent Dirichlet Analysis of Constructed Response Items*. Paper presented at the annual meeting of the National Council on Measurement in Education, Toronto, Canada.

- Kwak, M., **Kim, S.**, Xiong, J., Choi, H.-J., & Cohen, A. (2018, July). *Dirichlet priors for latent Dirichlet allocation analysis of constructed response items*. Paper presented at the International Meeting of the Psychometric Society, New York, NY.
- Kim, S.**, Lu, Z., & Cohen, A. (2018, Apr.). *Latent class analysis for supervised latent Dirichlet allocation*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.
- Kwak, M., **Kim, S.**, Choi, H.-J., Xiong, J., & Cohen, A. (2018, Apr.). *Topic modeling analysis of constructed response items*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.
- Kim, S.**, Lu, Z., & Cohen, A. (2017, July). *Topic modeling for longitudinal text data*. Paper presented at the International Meeting of the Psychometric Society, Zurich, Switzerland.
- Kim, S.**, Lu, Z., & Cohen, A. (2017, Apr.). *Bayesian structural equation modeling analysis using the Polya-Gamma method*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.
- Kwak, M., **Kim, S.**, & Cohen, A. (2017, Apr.). *Text analysis of students' constructed response answers*. Poster presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.
- Xiong, X. & **Kim, S.** (2017, Apr.). *Exploring reliability of each area for a multistage adaptive test*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.
- Kim, S.**, Kwak, M., Cardozo-Gaibisso, L., Buxton, C., & Cohen, A. (2017, Jan.). *Statistical and qualitative analyses of students' answers to a constructed response test of science inquiry knowledge*. Paper presented at the International Conference on Writing Analytics, Tampa, FL.
- Kwak, M., **Kim, S.**, & Cohen, A. (2017, Jan.). *Mining students' constructed response answers*. Paper presented at the International Conference on Writing Analytics, Tampa, FL.
- Kim, S.**, Kwak, M., & Cohen, A. (2016, July). *A mixture partial credit model with language-based covariates*. Paper presented at the International Meeting of the Psychometric Society, Asheville, NC.
- Kim, M., Cohen, A., Lu, Z., **Kim, S.**, Buxton, C., & Alexsaht-Snyder M. (2016, Apr.) *Speededness in a constructed response science test*. Paper presented at the annual meeting of the National Council on Measurement in Education, Washington, DC.
- Kim, S.**, Kwak, M., & Cohen, A. (2016, Apr.). *A mixture partial credit model analysis using language-based covariates*. Poster presented at the annual meeting of the American Education Research Association, Washington, DC.

- Kim, S.**, Lu, Z., & Cohen, A. (2015, July). *A structural equation modeling approach to estimating the reliability of tests with items having different numbers of ordered categories*. Paper presented at the International Meeting of the Psychometric Society, Beijing, China.
- Kim, S.** & Lu, Z. (2015, Apr.). *Test length and reliability estimates: using a structural equation modeling approach*. Poster presented at the annual meeting of the American Education Research Association, Chicago, IL.
- Kim, S.**, Lu, Z., & Cohen, A. (2015, Apr.). *Omission tendency and tree-based item response models*. Poster presented at the annual meeting of the American Education Research Association, Chicago, IL.
- Kim, S.** & Engelhard, G. (2015, Feb.). *Reliability of test scores: from the perspective of classical test theory and structural equation modeling*. Poster presented at the 2015 College of Education Graduate Student Research Conference. Athens, GA.
- Lu, Z. & **Kim, S.** (2015, Feb.). *IRTtree analysis for binary outcomes with missing values*. Poster presented at the 2015 College of Education Graduate Student Research Conference. Athens, GA.
- Kim, M., Cohen, A., **Kim, S.**, Lu, Z., & Choi, Y. (2015, Feb.). *Effects of speededness on constructed-response items for English language learners*. Poster presented at the 2015 College of Education Graduate Student Research Conference. Athens, GA.
- Choi, Y., Cohen, A., Lu, Z., & **Kim, S.** (2014, Apr.). *The impact of equating on detection of treatment effects*. Paper presented at the annual meeting of the National Council on Measurement in Education. Philadelphia, PA.
- Buxton, C., Alexsaht-Snider, M., Aghasaleh, R., Kayumova, S., & **Kim, S.** (2014, Apr.). *Getting to argumentation with English learners: The intersection of academic language and science inquiry practices*. Poster presented at the annual meeting of the American Education Research Association, Philadelphia, PA.
- Kim, S.** & Lu, Z. (2014, Feb.). *Comparing tree based item response models with an IRT model as a HGLM*. Poster presented at the 2014 College of Education Graduate Student Research Conference. Athens, GA.
- Shin, S. & **Kim, S.** (2012, Oct.). *Effects of ability grouping on academic excellence and equality in schools*. Paper presented at the 13th International Conference on Educational Research. Seoul, Korea.

TEACHING EXPERIENCE

Teaching Assistant:

Department of Educational Psychology, University of Georgia

- ERSH 8750: Structural Equation Modeling

Spring 2016

- Graded homework and held 2 office hours per week.
- ERSH 8770: Hierarchical Linear Models Fall 2016
 - Led lab sessions, graded homework and held 2 office hours per week.

Instructor:

Kaiser Permanente, Mid-Atlantic Permanente Research Institute Summer 2022

- Instructor for an introductory statistics course provided for internal medicine residents.

Department of Statistics, Seoul National University, South Korea Fall 2012

- Instructor for a lab associated with a basic statistics course.
 - Independently designed the entire lab course including homework, quizzes, exams, and SAS programming instruction.

Mathematics Teacher (with National License):

Mujin Middle School, South Korea 2008 - 2011

- Developed lessons and taught 6th, 7th, and 8th grade students.

INVITED LECTURES

Department of Educational Psychology, University of Georgia

- EPSY 9000: Doctoral Research Topic Modeling Reading Group Fall 2017

Department of Educational Theory and Practice, University of Georgia

- ETAP 2200: Education Around the World Fall 2017

Department of Educational Psychology, University of Georgia

- ERSH 8770: Hierarchical Linear Modeling Fall 2016

PROFESSIONAL SERVICE

Manuscript Reviewer

- Health Care Systems Research Network
- Measurement: Interdisciplinary Research and Perspectives
- American Educational Research Association
- Annual Meeting of National Council on Measurement in Education

NCME Career Award Committee

National Council on Measurement in Education
 Graduate Student Representative 2017 - 2018

Quantitative Methodology Faculty Search Committee

University of Georgia
 Graduate Student Representative 2016 - 2017

Graduate Researchers in Educational Psychology

University of Georgia

President

2016

Secretary

2015

Program representative: Quantitative Methodology

2015 - 2016