# YOUNGWON KIM

**Address**: Seattle, WA 98125 **Phone**: (512) 888-8073 Email: youngwon kim@gse.harvard.edu | Google Scholar | Website

#### **EDUCATION**

Jun 2023 Ph.D., Measurement & Statistics College of Education, University of Washington, Seattle, WA Dissertation: Modern prediction algorithms for factor analyses: Comparing accuracy-efficiency trade-offs (Advisor: Dr. Elizabeth Sanders) M.A., Educational Psychology *May 2017* University of Texas at Austin, Austin, TX Feb 2011 B.A., International & Area Studies, Counseling Psychology, & Social Welfare Handong Global University, Pohang-si, Gyeongbuk, South Korea

### AREAS OF INTRESTS

- Statistics and Psychometrics
- Machine Learning and Natural Language Processing
- Large Language Models
- Causal Inference
- Psychology

# AWARDS/HONORS

2019 Young Researcher Award, Korean-American Educational Research

Association (KAERA)

2015 - 2021OTEFE Foundation Scholarship, OTEFE Foundation, Inc.

#### RESEARCH EXPERIENCE

# Aug 2023 – Present Postdoctoral Fellow

Causality, Applications, and Research in Education and Statistics, Harvard Graduate School of Education, Harvard University, Cambridge, MA

**Project:** Practical tools for large-scale evaluation of text data in randomized trials in education (Drs. Luke Miratrix, Reagan Mozer, and Shireen Al-Adeimi)

- Conduct research on the performance and accuracy of large language models versus machine learning algorithms for automated essay scoring
- Develop the R package (rcttext) to effectively leverage text in the context of randomized controlled trials (RCTs)
- Create academic papers, tutorial materials, and blog posts to assist applied researchers in utilizing text in RCT contexts

# Jun 2019 – Jun 2023

Center for Social Science Computation and Research, University of Statistical Consultant Washington, Seattle, WA (Dr. Jerald Herting)

- Provided statistical and programming consulting services to students and faculty from across UW Seattle campus
- Offered guidance on research designs, data cleaning, data analysis, and use of data analysis and visualization software (Mplus, Python, R, SPSS, SQL, and Tableau)
- Conducted remote synchronous and asynchronous workshops on *R* and *SPSS*

# Jun 2022– Aug 2022 Research Intern

# Human Services Division - Education Systems Program Area, American Institutes for Research (AIR), Arlington, VA (Dr. Cong Ye)

- Developed a school-level social vulnerability index for the CEE (COVID-19 and Equity in Education) projects
- Participated in AIR Hackthon using the CEE longitudinal database and 2022 Summer Intern Expo

# **RESEARCH EXPERIENCE (Cont'd)**

# Research Assistant

May 2018 – Jun 2022 School of Education & Human Development, Texas A&M University, College Station, TX

> **Project:** Asian International Graduate Students' Professional Development and Psychological Well-Being (Dr. Katie Koo)

- Interviewed international graduate students and transcribe the interviews
- Coded and analyzed transcripts on the usage of social media, language proficiency, academic achievement, career development, social support, mental and physical health issues of international students
- Contributed to writing proposals for conference presentations and manuscripts for publication

# Research Assistant

Mar 2020 – Dec 2020 Center for the Study of Teaching and Policy, University of Washington, Seattle, WA

Project: Teacher Workforce (Drs. Ana Elfers and Marge Plecki)

- Co-designed and implemented statistical models to examine the teacher workforce in Washington State with respect to teacher retention and mobility
- Co-authored results for presentation, white paper, and publication

# Jul 2018 – Sep 2018 Data Wrangler

Health Sciences Library, University of Washington, Seattle, WA (Dr. Lorrie Dong)

- Performed data cleaning and created dashboards for National Network of Libraries of Medicine (NNLM)
- Created R functions to automate data-cleaning processes

# Research Assistant

Feb 2015 – Aug 2017 Higher Education Learning and Persistence Lab, College of Education, University of Texas at Austin, Austin, TX (Dr. Carlton Fong)

- Collected documents and coded data for meta-analyses on psychosocial factors and critical thinking of community college students
- Conducted meta-analyses to examine growth- and fixed-mindset profiles and associations with stress, need satisfaction, coping strategies, and fear of failure

# **TEACHING EXPERIENCE**

#### **University of Washington**

Sep 2021 – Dec 2021 EDPSY 576: Multilevel Modeling, College of Education

Apr 2019 – Jun 2019 PSYCH 315: Understanding Statistics in Psychology, Department of Psychology

Sep 2018 – Mar 2019 PSYCH 209: Fundamentals of Psychological Research, Department of Psychology

Sep 2017 – Dec 2017 EDPSY 302: Child Development and Learning, College of Education

## **Handong Global University**

July 2020 & 2021

Online Summer Workshop on Applied Statistics, School of Counseling Psychology and Social Welfare

## **University of Texas at Austin**

Jan 2017 – May 2017 SDS 332: Statistical Models for the Health and Behavioral Sciences,

Department of Statistics and Data Sciences

Sep 2015– Dec 2016 MKT282: Marketing Analytics & Applications, McComb School of Business

# **PUBLICATIONS**

#### Peer-reviewed articles

- Koo, K., **Kim, Y. W.**, Lee, Y., & Rodriquez, S. (under review). What does it mean to be an Asian in a pandemic? Exploring experiences of racism and discrimination among Asian international students in the United States during COVID-19. *Journal of Counseling Psychology*.
- Fong, C. J., Schallert, D. L., Williamson, Z. H., Lin, S., Williams, K. M., & **Kim, Y. W.** (2023). Are self-compassionate writers more feedback literate? Exploring undergraduates' perceptions of feedback constructiveness. *Assessing Writing*, *57*. https://doi.org/10.1016/j.asw.2023.100761
- Elfers, A., Plecki, M., **Kim, Y. W.**, & Bei, N. (2022). How retention and mobility rates differ for teachers of color? *Teachers and Teaching*, 28, 724-741. <a href="https://doi.org/10.1080/13540602.2022.2098271">https://doi.org/10.1080/13540602.2022.2098271</a>
- Fong, C. J., Schallert, D. L., Williams, K. M., Williamson, Z. H., Lin, S., **Kim, Y. W., &** Chen, L. (2021). Making feedback constructive: The interplay of undergraduates' mastery goal orientation with feedback specificity and friendliness. *Educational Psychology*, 1-19. https://doi.org/10.1080/01443410.2021.1951671
- Fong, C. J. & **Kim**, Y. W. (2021). A clash of constructs? Re-examining grit in light of academic buoyancy and future time perspective. *Current Psychology*, 40(4), 1824-1837. https://doi.org/10.1007/s12144-018-0120-4
- Koo, K., **Kim, Y. W.**, Lee, Y., & Nyunt, G. (2021). "It's my fault": Exploring experiences and mental wellness among Korean international graduate students. *Journal of International Students*, 11(4), 790-811. https://doi.org/10.32674/jis.v11i4.2801
- Fong, C. J., Schallert, D. S., Williams, K. M., Williamson, Z. H., Warner, J. R., Lin, S., & **Kim, Y. W.** (2018). When feedback signals failure but offers hope for improvement: A process model of constructive criticism. *Thinking Skills and Creativity, 30,* 42-53. <a href="https://doi.org/10.1016/j.tsc.2018.02.014">https://doi.org/10.1016/j.tsc.2018.02.014</a>
- Fong, C. J., Williams, K. M., Williamson, Z. H., Lin, S., **Kim, Y. W.**, & Schallert, D. L. (2018). "Inside out": Student appraisals for achievement emotions regarding constructive criticism, positive feedback, and negative feedback on writing. *Motivation and Emotion*, *42*, 236-257. https://doi.org/10.1007/s11031-017-9658-y
- Fong, C. J., Davis, C. W., Kim, Y., **Kim, Y. W**., Marriott, L. A., & Kim, S. (2017). Psychosocial factors and community college student success: A meta-analytic investigation. *Review of Educational Research*, 87(2), 388-424. <a href="http://doi.org/10.3102/0034654316653479">http://doi.org/10.3102/0034654316653479</a>
- Fong, C. J., Kim, Y., Davis, C. W., Hoang, T., & **Kim, Y. W.** (2017). A meta-analysis on critical thinking and community college success. *Thinking Skills and Creativity, 26,* 71-83. <a href="http://doi.org/10.1016/j.tsc.2017.06.002">http://doi.org/10.1016/j.tsc.2017.06.002</a>

#### **CONFERENCE PRESENTATIONS**

# **Joint Statistical Meetings (JSM)**

Mozer, R., Miratrix, L., **Kim, Y.,** & Al-Ademi, S. (2024, August). *Statistical innovation with text as data: Emerging trends and future directions.* Paper accepted at the JSM Annual Meeting. Portland, OR.

#### **Association for Education Finance & Policy (AEFP)**

**Kim, Y.**, Mozer, R., Miratrix, L., & Al-Ademi, S. (2024, March). *Assessing essay grading with machine learning and large language models: A comparative study on efficacy and accuracy*. Paper presented at the AEFP Annual Meeting. Baltimore, MD.

# **CONFERENCE PRESENTATIONS (Cont'd)**

# **National Council on Measurement in Education (NCME)**

- **Kim**, Y. & Sanders, E. A. (2023, April). *Exploratory measurement modeling with Lasso*. Paper presented at the NCME Annual Meeting. Chicago, IL.
- Bei, N., Sanders, E. A., Abe, N., & **Kim, Y**. (2021, June). *Measuring item process data with network analysis methods*. Paper presented at the NCME Annual Meeting (Virtual).

# **International Meeting of the Psychometric Society (IMPS)**

**Kim, Y**. & Sanders, E. A. (2023, July). *Exploratory measurement modeling with Lasso*. Paper presented at the IMPS Annual Meeting. College Park, MD.

# **American Educational Research Association (AERA)**

- **Kim, Y**. & Sanders, E. A. (2024, April). *Enhancing factor analysis: Evaluating factor retention accuracy with measurement error*. Paper presented at the AERA Annual Meeting. Philadelphia, PA.
- Koo, K., Kwon, J., & **Kim, Y**. (2022, April). *Strive to survive in a pandemic in a foreign country: Korean international students' well-being during covid-19*. Paper presented at the AERA Annual Meeting. San Diego, CA.
- **Kim, Y.** (2021, April). *Understanding the role of academic achievement and psychosocial factors on adolescent depression: A latent growth model.* Paper presented at the AERA Annual Meeting (Virtual).
- Koo, K, **Kim, Y.**, Lee, Y., & Rodriquez, S. (2021, April). What does it mean to be an Asian in a pandemic? Exploring experiences of racism and discrimination among Asian international students in the United States during covid-19. Paper presented at the AERA Annual Meeting (Virtual).
- Elfers, A., Plecki, M., **Kim, Y.**, & Bei, N. (2021, April). *Examining differences in the retention and mobility of teachers of color by racial/ethnic group*. Paper presented at the AERA Annual Meeting (Virtual).
- **Kim, Y.** (2020, April). Executive function difficulty, self-esteem, happiness, gender, and parent's income as the predictors of digital addiction. Paper accepted for presentation at the AERA Annual Meeting, San Francisco, CA. (Conference canceled)
- Koo, K., **Kim, Y.**, Lee, Y., & Nyunt, G. (2020, April). What makes them happy? A qualitative study on Korean international graduate students' experiences and psychological well-being. Paper accepted for presentation at the AERA Annual Meeting, San Francisco, CA. (Conference canceled)
- **Kim, Y.** (2019, April). *Trajectories of parents' socioeconomic status, child-parent interaction, children's self-control, school readiness, and academic performance.* Paper presented at the AERA Annual Meeting, Toronto, ON.
- Fong, C. J., Davis, C., Li, D., & **Kim, Y.** (2017, April). *A meta-analysis of noncognitive factors and community college student success at 4-year institutions*. Paper presented at the AERA Annual Meeting, San Antonio, TX.
- Fong, C. J., **Kim, Y.**, Lin, S., & Hoang, T. (2017, April). *Do Noncognitive Interventions Enhance Community College Student Success? A Systematic Review and Meta-Analysis*. Paper presented at the AERA Annual Meeting, San Antonio, TX.
- Williamson, Z. H., Fong, C. J., Lin, S., Williams, K. M., **Kim, Y.**, & Schallert, D. L., (2017, April). *Self-Kindness in the Face of Criticism: Self-Compassion Influences Undergraduates' Perceptions of Constructive Feedback.* Paper presented at the AERA Annual Meeting, San Antonio, TX.
- Fong, C. J., Kim, Y., Davis, C. W., **Kim, Y.**, Marriott, L. A., & Kim, S. (2016, April). *Psychosocial and self-regulatory correlates of community college student success: A systematic review and meta-analysis*. Paper presented at the AERA Annual Meeting, Washington, D.C.

# **CONFERENCE PRESENTATIONS (Cont'd)**

# American Educational Research Association (AERA, Cont'd)

- Fong, C. J., Kim, Y., Davis, C. W., **Kim, Y.**, Marriott, L. A., & Kim, S. (2016, April). *Psychosocial and self-regulatory correlates of community college student success: A systematic review and meta-analysis*. Paper presented at the AERA Annual Meeting, Washington, D.C.
- Fong, C. J., Kim, Y., Davis, C. W., **Kim, Y.**, Marriott, L. A., & Kim, S. (2016, April). *Psychosocial and self-regulatory correlates of community college student success: A systematic review and meta-analysis*. Paper presented at the AERA Annual Meeting, Washington, D.C.
- Fong, C. J., Schallert, D. L., Williams, K. M., Williamson, Z. H., Lin, S., Chen, L., **Kim, Y.** (2016, April). *Making feedback constructive: The interplay of undergraduates' mastery goal orientation with feedback specificity and friendliness*. Paper presented at the AERA Annual Meeting, Washington, D.C.

# **Korean-American Educational Researchers Association (KAERA)**

- **Kim, Y.** (2020, April). Understanding the role of academic achievement and psychosocial factors on adolescent depression: A latent growth model. Paper accepted at the KAERA Annual Meeting, San Francisco, CA. (Conference canceled)
- Koo, K., & Kim, Y. (2020, April). The effectiveness of focusing art therapy on PTSD and cultural adjustment among North Korean refugee girls. Paper accepted for presentation at the KAERA Annual Meeting, San Francisco, CA. (Conference canceled)
- Koo, K., **Kim, Y.**, & Lee, Y. (2019, April). What makes them happy? Korean international graduate students' personal and professional experiences and emotional health. Paper presented at the KAERA Annual Meeting, Toronto, ON.

# **American College Personnel Association (ACPA)**

Koo, K., **Kim, Y.**, & Lee, Y. (2019, March). What makes them happy? Asian international graduate students' personal and professional experiences and emotional health. Paper presented at the ACPA Annual Meeting, Boston, MA.

# **Other Referred Conferences**

- Fong, C. J., Davis, C., Li, D., **Kim, Y.**, & Hartman, C. E. (2016, August). *A meta-analysis of noncognitive factors and community college transfer student success at four-year institutions*. Paper presented at the Texas Higher Education Symposium, Austin, TX.
- Lin, S., Fong, C. J., & **Kim, Y.** (2016, April). *Make up your mind: A person-centered approach to growth and fixed mindsets among Chinese undergraduates*. Paper presented at the Chinese American Education Research & Development Association, Washington, D.C.
- Kim, Y., Fong, C. J., Davis, C. W., Hoang, T., & **Kim, Y.** (2016, March). *A meta-analysis on critical thinking and community college student achievement*. Paper presented at the Council for the Study of Community Colleges Annual Meeting, Plano, TX.

#### INVITED TALKS AND PRESENTATIONS

**Kim, Y**. (2023, October). *Modern prediction algorithms for factor analyses: Comparing accuracy-efficiency trade-offs.* Talk presented at the Mathematical Sciences Research Seminar, Bentley University (Virtual).

# **INVITED TALKS AND PRESENTATIONS (Cont'd)**

- **Kim, Y**. (2023, October). Enhancing factor analysis: Evaluating factor retention accuracy with measurement error. Talk presented at the lab meeting of Causality, Applications, and Research in Education and Statistics, Harvard Graduate School of Education / Harvard Department of Statistics, Harvard University, Cambridge, MA.
- **Kim, Y.** (2021, April). *Racism and the racialized experience among Asian international students in the U.S.* Invited panel by ACPA 2021 International Colloquium Support for international students during and after Covid-19: Best practices from a global perspective (Virtual).
- **Kim, Y.** (2020, July). *Racism and racialized identities: The experience among Asian international students in the United States*. Invited panel by ACPA Commission for Global Dimensions of Student Development (Virtual).

# **WORKS IN PROGRESS**

# **Manuscripts**

- **Kim, Y. W.**, Mozer, R., Miratrix, L., & Al-Ademi, S. (in preparation). Chatgpt vs. machine learning: Assessing the efficacy and accuracy of large language models for automated essay scoring.
- **Kim, Y. W.** & Sanders, E. (in preparation). Enhancing factor analysis: Evaluating factor retention accuracy with measurement error.

# **Software Development**

Mozer, R., Miratrix, L., & Al-Ademi, S. & **Kim. Y. W.** (in preparation). R package "*rcttext*": Tools for impact analysis in randomized trials with text outcomes

# **SERVICE**

July 2023 – Current <b>Ad-hoc Reviewer</b>	•	Current Psychology
Oct 2020 – Current Ad-hoc Reviewer	•	Journal of International Students
Oct 2022  Program planning committee member	•	Section 2 (Statistical theory and quantitative methodologies), Division D program planning committee meeting, AERA, Washington, D.C.
Aug 2021 – Aug 2022 Student Support Chair	•	Associated Students of the College of Education (ASCE), University of Washington, Seattle
Aug 2021 – Aug 2022 GSC Liaison	•	AERA Division D Graduate Student Committee (GSC) Liaison, American Educational Research Association, Washington, D.C.
Apr 2021 – Jun 2021 <b>Mentor</b>	•	Next Generation Mentorship Program (NGMP), Office of Student Diversity and Inclusion, College of Education, University of Washington, Seattle
Jul 2019 – Jan 2020 Student Representative	•	New Hire Search Committee, Measurement & Statistics, College of Education, University of Washington, Seattle