Kibum Moon

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EDUCATION

Georgetown University

Aug. 2022 -

Ph.D. Student in Psychology

Washington, DC

Concentration: Human Development and Public Policy (HDPP)

Advisor: Kostadin Kushlev, Ph.D.

Korea University

Sep. 2015 – Feb. 2018

M.A. in Clinical and Counseling Psychology

Seoul, Korea

Thesis title: The Effect of Implicit Attitude Toward a Partner on Relationship

Satisfaction and Relational Conflict

Advisor: Young-gun Ko, Ph.D. Cumulative GPA: 4.0 / 4.0

Korea University

Mar. 2009 – Feb. 2015

B.A. in Psychology / Science Technology Studies (double major)

Seoul, Korea

Cumulative GPA: 3.91 / 4.0

University of New South Wales

Exchange student in the School of Psychology

Feb. 2014 – May 2014 Sydney, Australia

PUBLICATIONS

- 1. Kim, J., **Moon, K.**, Kim, S., Kim, H., & Ko, Y. G. (2022) The Relationship between Mental Representations of Self and Social Evaluation: Examining the Validity and Usefulness of Visual Proxies of Self-Image. *Frontiers in Psychology*, *13*, 8361.
 - doi: 10.3389/fpsyg.2022.937905
- 2. Kim, J., **Moon, K**, Lee, J., Jeong, Y., Lee, S., & Ko, Y. G. (2022). Online learning performance and engagement during the COVID-19 pandemic: Application of the dual-continua model of mental health. *Frontiers in psychology*, 4228.
 - doi: 10.3389/fpsyg.2022.932777
- 3. Min, H., Kim, J., **Moon, K**. et al. Development and validation of COVID-19 Impact Scale. *BMC Psychol* 10, 88 (2022).
 - doi: 10.1186/s40359-022-00793-w
- 4. **Moon, K**, Kim, J., Lee, J. (2021) The Early Prediction Model of Student Performance Based on Deep Neural Network Using Massive LMS Log Data. *Journal of the Korea Contents Association*. doi: 10.5392/JKCA.2021.21.10.001
- 5. Lee, J., **Moon, K**, Han, S., Lee, S., Kwon, H., Han, J. (2021) Development and Application of an AI-Powered Adaptive Course Recommender System in Higher Education: An Example from K University. *Journal of Educational Technology*.
 - doi: 10.17232/KSET.37.2.267
- 6. **Moon, K**, Kim, S., Kim, J., Kim, H., & Ko, Y. (2020). The Mirror of Mind: Visualizing Mental Representations of Self Through Reverse Correlation. *Frontiers in Psychology*, *11*, 1149. doi: 10.3389/fpsyg.2020.01149
- 7. Kim, S., **Moon, K**, Kim, J., & Ko, Y. (2020). The Relationship Between Borderline Personality Features and Affective Responses to Altering Emotional Context. *Current Psychology*. doi: 10.1007/s12144-020-01077-5

- 8. Kim, J., **Moon, K**, & Ko, Y. (2020). A Validation of the Korean Version of Adolescent Positive Mental Health Scale. *Korean Journal of Health Psychology*, 25(4), 823-834. doi: 10.17315/kjhp.2020.25.4.012
- 9. Lee, S., **Moon, K**, & Ko, Y. (2019). The Effects of Ego Depletion and Psychological Burden on Fatigue in Everyday Life: Focusing on Narcissism. *Korean Journal of Clinical Psychology*, *38*(1), 60-69.

doi: 10.15842/kjcp.2019.38.1.005

10. Back, I., **Moon, K**, & Ko, Y. (2019). A Validation Study of Mental Health Two-Factor Model: In a Sexual Minority Population. *The Korean Journal of Woman Psychology*, 24(4).

PATENTS

- 1. **Moon, K,** Lee, J., Lee, S., Han, S., Kwon, H., Han, J., Kim, G.T. (2022). System and Method for Recommending Related Courses Based on Graph Data and Recording Medium for Performing the Same. Application Number: 10-2022-0038656.
- 2. **Moon, K,** Lee, J., Lee, S., Han, S., Kwon, H., Han, J., Kim, G.T. (2022). System and Method for Integrated Recommendation of Learning Activities Based on Keywords of Interest Using Academic Domain Embedding and Recording Medium for Performing the Same. Application Number: 10-2022-0026995.
- 3. **Moon, K,** Han, J., Kwon, H., Lee, S., Lee, J., Han, S., Kim, G.T. (2021). System and Method for Recommendation of Course Based on Course Similarity and Computer Program for the Same. Application Number: 10-2021-0042245.
- 4. **Moon, K,** Lee, J., Lee, S., Han, S., Kwon, H., Han, J., Kim, G.T. (2021). System and Method for Recommendation Major Based on Keywords of Interests by Users and Computer Program for the Same. Application Number: 10-2021-0064780.
- 5. Lee, J., **Moon, K**, Han, S., Kwon, H., Han, J., Kim, G.T. (2022). Major Recommendation System and Major Recommendation Method Using Relationship-Based Knowledge Graph Embedding. Application Number: 10-2022-0028171

MANUSCRIPTS UNDER REVIEW & IN PREPARATION

1. Kim, H., Kim J., **Moon, K**, Jeong, J., Ko. Y. (*under review*) Effects of Communal Narcissism and Altruism on Psychosocial Maturity.

CONFERENCE PRESENTATIONS

- 1. **Moon, K.**, Lee, S., Ko, Y.G., & Kushlev, K. (2023, May 25-28). *Benefits of happiness on learning: Emotional well-being predicts GPA and online learning engagement during COVID-19*. The 2023 APS Annual Convention, Washington, D.C., USA.
- 2. **Moon, K.**, Lee, S., Ko, Y.G., & Kushlev, K. (2023, Feb. 23). *Does happiness benefit learning? Emotional well-being predicts GPA and online learning engagement during COVID-19*. Happiness and Well-Being Preconference of the Society for Personality and Social Psychology Annual Convention, Atlanta, GA.
- 3. Kim, S., Kim, J., **Moon, K**, Kang W., Ko, Y. (2021). *The Relationship between Meta-emotion and Mental Health*. Poster presentation at the 2021 Spring Conference of Korean Clinical Psychology Association, Seoul, South Korea
- 4. **Moon, K** (2020). *The Impact of COVID-19 on Quality Education: Focusing on Socio-economic Disparity in Online Learning*. Oral presentation at the 3rd K.U. Innovation Forum, Seoul, Republic of Korea
- 5. Kim, D., Shin, W., Han., K., Lee, J., **Moon, K**, Lee, S., Han, S., Han, S. (2020). *A system for recommending university liberal arts courses using collaborative filtering*. Short Paper at the 2020

- Fall Conference of Korean Institute of Industrial Engineers, Seoul, South Korea
- 6. Kim, H., **Moon, K**, Kim, J., & Ko, Y. (2020). *The Relationship Between Communal Narcissism and Altruism*. Poster presentation at the 2020 Fall Conference of Korean Clinical Psychology Association, Online
- 7. Kim, J., **Moon, K**, Kim, S., & Ko, Y. (2020). Clinical Usefulness of Visualizing Mental Representations of Self through Reverse Correlation Method to Assess Depression and Anxiety. Poster presentation at 2020 APS Virtual Poster Showcase, Virtual
- 8. Kim, J., **Moon**, K, Park, J., Kim, S., & Ko., Y. (2020). *The Relationship Between Mental Health and Belongingness Orientation of the Homeless*. Poster presentation at the 2020 Spring Conference of Korean Clinical Psychology Association, Online
- 7. Lee, J., **Moon, K**, Lee, S., Han, S., Han, J., & Kwon, H. (2019). *Convergence in University Interdisciplinary Education*. Oral presentation at 2019 Korea Academy of Complexity Studies, Seoul, Republic of Korea
- 8. **Moon, K** & Ko, Y. (2018). Facial Expression Accommodation Predicts Quality and Durability of Romantic Relationships. Poster presentation at the 30th APS Annual Convention, San Francisco, CA. U.S.
- 9. **Moon, K**, Kim, H., Kim, S., Lee, C., & Ko, Y. (2017). *Validation Study of the Korean version of the Balanced Index of Psychological Mindedness*. Poster presentation at the 2017 Fall Conference of Korean Clinical Psychology Association, Seoul, South Korea
- 10. Park, K., Jung, S., **Moon, K**, Pyo, S., & Choi, K. (2016). *Empirically Supported Treatments in Korea*. Oral presentation at the 2016 Spring Conference of Korean Clinical Psychology Association, Chuncheon, Korea

SCHOLARSHIPS & AWARDS

2021 Fulbright Scholarship U.S. Department of State, Bureau of Educational and Cultural Affairs – Fulbright **Program** The Korean-American Educational Commission (KAEC) Principal candidate for the 2022 Fulbright Graduate Student Program Award Full tuition and stipend up to \$40,000 per year (for the first 2 years) **Research Assistance Scholarship** 2015 -2017Department of Psychology, Korea University Full tuition for 4 semesters (\$23.600) *A merit-based scholarship awarded for students who have excellent research potential and actively contribute to the academic development of the department. K.U. Alumni Scholarships 2014 The Alumni Association, Korea University Full tuition (\$4,200) *Among 1 of 177 students at Korea University selected for this merit-based scholarship. Selected based on academic excellence and potential to positively impact society. **Choonpha Hwangchungha Scholarships** 2013 The Choonpha Hwangchungha Scholarship Foundation Full tuition (\$4,200) *1 of 6 students at Korea University selected for this merit-based scholarship. Selected based on academic excellence. Sung Ryun Scholarships 2013 The Sung Ryun Scholarship Foundation Full tuition (\$4,200)

*1 of 65 students selected across South Korea for this scholarship. Selected based on the potential to become a global leader.

Study Scholarships

2012, 2014

Korea University

Awarded for high GPA (\$1,000 / \$1,100)

*Awarded for high academic achievement and financial need.

Honors Scholarships

2009

Department of Psychology, Korea University

Students with a high GPA in the department

35% of tuition (\$1,250)

*A merit-based scholarship awarded for students in the top 5% of GPA in the Department

Semester High Honors

2009

Department of Psychology, Korea University

Students with a GPA of over 4.0 for 5 semesters

-2014

WORK & RESEARCH EXPERIENCE

Data Scientist

Oct. 2019

Data Hub Team, Office of Digital Information, Korea University

– Feb. 2022

Advisor: Gyu-Tae Kim, Ph.D.

Project: AI-Based Psychological and Academic Support Program for College Students in COVID-19

- Government-funded project to aid at-risk students in terms of mental health and academic achievement
- Built early prediction models based on deep learning algorithms to identify at-risk students using Learning Management System (LMS) log data; Conducted statistical analyses to examine "digital divide" among college students by socioeconomic status; Published 1 research article; Delivered presentation at forum.

 * Recognized as the best practice of using AI technologies in higher education by Korean Ministry of Education and covered by the presing the property of the presentation and covered by the presing the presentation and covered by the presentation are presented by the presentation and covered by the presentation are presented by the presentation and the presentation are presented by the presentation are presented by the presentation and the presented by the presented by the presentation and the presented by the presentation are presented by the pres

Project: AIKU: Recommendation System based on ML/DL in the Context of Higher Education

- Government-funded project to develop A.I. services to recommend lectures, majors, and extra-curricular activities for college students based on personal interests.
- Developed core machine learning and deep learning algorithms; Applied for two patents (*primary inventor*); Contributed to UI/UX designs; Published 1 research article.

*Awarded as the representative and best program among 22 programs for the University Innovation Support Project in two consecutive years; Covered by +10 media outlets as the first official A.I. service at college provided in South Korea.

Clinical Researcher

Feb. 2019

- Sep. 2019

Student Counseling Center, Korea University Principal Investigator: Young-gun Ko, Ph.D.

Project: Visualizing Self-image Using Reverse Correlation (RC) Method

- First evidence to support the validity of the RC method to visualize how people perceive themselves.
- Initiated and prepared manuscript from conceptualization to dissemination (*first author*); Built on/off-line RC tasks; Tested validity and usefulness of *RC-outputs* by using self-reports and facial photos.

Project: Borderline Personality Features and Emotional Recovery

• Investigation of the association between borderline personality features and prompt

- emotional recovery
- Involved in developing assessment to measure prompt emotional recovery by assessing residual antipathy to neutral face followed by hostile faces; Built computerized experiments; Generated facial stimuli using facial morphing; Participated in publication process (*second author*).

Post-Master Research Associate

Mar. 2018

Mentoring Counseling Center of College of Liberal Arts at Korea University Advisor: Young-gun Ko, Ph.D.

- Jan. 2019

Project: Validation of the Korean Version of Positive Mental Health Scales

- Empirical studies to validate the two-factor structure of Positive Mental Health Scales in South Korea
- Conducted exploratory and confirmatory factor analyses using data obtained from adolescent and sexual-minority samples; Wrote the results section of manuscripts.

Project: The Effects of Ego Depletion and Psychological Burden on Fatigue in Everyday Life

- Ecological Momentary Assessment (EMA) study to explore the moderating effect
 of overt and covert narcissism on the relationship between psychological burden
 and fatigue in daily life.
- Conducted multilevel analyses to handle the nested structure of experience sample datasets; wrote and revised a significant portion of the manuscript (second author).

Clinical Psychology Master's Program Student

Sep. 2015

Department of Psychology, Korea University

- Feb. 2018

Advisor: Young-gun Ko, Ph.D.

Project: Implicit Accommodation and Romantic Relationship Longevity

- Longitudinal study to compare the predictive powers of implicit and explicit accommodative behaviors
- Developed behavioral measure to assess implicit accommodation using automatic facial reactions to partner's angry face; Employed automatic facial coding algorithm to evaluate valence of facial responses; Delivered presentation at conference; Wrote manuscript (first author).

CLINICAL & PRACTICE EXPERIENCE

Clinical Researcher Assistant

Feb. 2019

Student Counseling Center, Korea University

– Sep. 2019

Principal Investigator: Young-gun Ko, Ph.D.

Project: Mental Fitness Program: Positive Psychotherapy

- Psycho-educative intervention to enhance mental well-being and optimal functioning in daily lives
- Provided group therapy for college students (26 sessions / 75 min., 3 groups), romantic couples and singles (8 sessions, 8 groups, 150 minutes each), and Junior High School Students (12 sessions / 50 min., 1 group) and individual therapy (12 sessions / 50 min.).
 - *Awarded as the leader with the highest score on client evaluation for two semesters (2015, 2016).
- Created online psychological assessment reports using *R shiny*; Developed mobile/P.C. App to train positive dialogue using *Google Natural Language API*,

Firebase, and R Shiny; Built dashboard for teachers to monitor the peer relationship of students.

* Though I participated in the Mental Fitness Project consistently while collaborating with Dr. Ko from 2015 to 2019, all relevant information was listed above for the convenience of space.

Clinical Practicum Student

Oct. 2015

Department of Psychology, Korea University; Department of Psychiatry, CHA Bundang — July. 2017 Medical Center

Supervisor: Eunjoo Yang, Ph.D., Kihye Sung, licensed clinical psychologist

• Participated in clinical practicum – Provided group therapy for college students (12 sessions / 75 min., 8 students), psychiatric inpatients (3 sessions / 50 min., 3 groups), and individual therapy (10 sessions, 50 min.); Observed full batteries of diagnostic assessments, group therapy and weekly morning seminars.

Project Manager

Oct. 2015

Mentoring Counseling Center of College of Liberal Arts at Korea University Advisor: Young-gun Ko, Ph.D.

- Feb. 2018

Project: The CORE Psychological Assessments for Personality and Aptitude of College Students

- Government-funded psychological services to improve adjustment of college students.
- Managed budget over \$100,000 for 2.5 years; Organized whole projects with +1,200 participants; Designed assessment packages; Conducted and provided +150 individual interpretation sessions.

TEACHING & MENTORING EXPERIENCE

- Assistant lecturer for *Life Designing and Self Understanding (SPGE208)* at Korea University led weekly discussion classes: 20-25 students/class in the Spring Semesters of 2017-2019 with: Eunjoo Yang, Ph.D.
- Hosted R programming and advanced statistics workshops for:
 - (Mar. 2020) Administrative officers: 5 sessions / 60 min.
 - (Feb. 2020) Licensed psychologists: 6 sessions / 75 min.
 - (Feb. 2018 / Mar. 2019) Psychology undergraduate and graduate students: 10 sessions in total / 75 min.
- Provided research mentorship for undergraduate researchers of UMA, an undergraduate research association funded by the Korean Psychological Association in 2016-2019 and 2021

ADDITIONAL & VOLUNTEER ACTIVITIES

- President of the breakdancing team (WACK) won two community b-boying contests
- Vice president of the student association of the Seoul Foreign Language High School
- Participated in the Student Welfare Committee (KU-Well) organized and managed student welfare programs
- Participated in the Korea University Buddy Assistant (KUBA) helped exchange students adjust to Korean culture and campus life
- Serviced for two years as an academic secretary of the Mental Fitness Positive Psychology Research Association under the Korea Clinical Psychology Association
- Enthusiastic scuba diver; dived in Iceland, Great Barrier Reef, Fiji, and the Philippines.

PROFESSIONAL SKILLS

Statistical Software & Programming Languages

R, Python, SQL, HTML, Markdown, JavaScript, Latex, Matlab, Linux, Git, NetLogo, M-Plus.

Statistical Analysis

Multilevel models, structural equation models (SEM), factor analyses, generalized regression models, social network analyses, actor-partner interdependent models (APIM), ecological diversity analyses, Bayesian analyses, bootstrapping.

Machine Learning & Deep Learning Frameworks

Dimension reduction, Natural Language Processing (NLP), predictive modeling, time serial analyses, graph analytics, network representation learning, recommendation system, Pytorch, Tensorflow, Scikit-learn, Stellargraph, Genism, Tidymodels.

Data Visualization Tools

R Shiny, Plotly/Dash, Gephi, Tableau, Power BI, Adobe Photoshop.

Language

Korean (native), English (proficient), Japanese (Intermediate)