Yunji Park, M.S.

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Department of Educational Psychology
University of Wisconsin- Madison
1500 Highland Ave. #271
Madison, WI 53706, United States

EDUCATION

2019 M.S. in Educational Psychology, University of Wisconsin–Madison, Madison, WI, United States
2014 M.A. in Cognition and Perception, Chung-Ang University, Seoul, Korea
2012 B.S. in Physics and B.A. in Psychology Chung-Ang University, Seoul, Korea
2010 1-year Exchange Student, University of California, Davis, CA, United States

HONORS AND AWARDS

AERA-NSF Institute on Statistical Analysis, *American Educational Research Association Grant Program, Laguna Beach, CA, USA, 2020*
Hartzman International Travel Awards, *School of Education in UW-Madison,* 2020
Outstanding Paper Awards, *Korean Journal of Cognitive Sciences,* 2014
BK 21 PLUS Scholarship, the Ministry of Education, Science, and Technology, 2013-2014
Scholarship for Graduate School Freshmen for Outstanding Academic Performance, Chung-Ang University), 2012-2014
Fellowship for the Best Academic Performance, Department of Physics, Chung-Ang University, Mar., 2012
Fellowship for the Best Academic Performance, Department of Physics, Chung-Ang University, 2009
Fellowship for the Best Academic Performance, Department of Physics, Chung-Ang University, Sep., 2008

PUBLICATIONS

Manuscripts

Park, Y. & Matthews, P.G. (abstract accepted for Special Issue). Revisiting and Refining Relations between Nonsymolic Ratio Processing and Symbolic Math Achievement. *Journal of Numerical cognition.*

Park, Y., Viegut, A.A., & Matthews, P.G. (submitted). More than the Sum of its Parts: Exploring the Development of Ratio Magnitude vs. Simple Magnitude Perception.

Park, Y., Viegut, A.A., & Matthews, P.G. (in preparation). Differential contribution of fractions comparison vs. estimation to higher mathematics.

Park, Y., Binzak, J.V., Kalra, P., Matthews, P.G., & Hubbard, E.M. (in preparation). Developmental changes in children's processing of nonsymbolic ratio magnitudes: A cross-sectional fMRI study.

Park, Y., Binzak, J.V., Dean, D.3rd, Alexander, A., Matthews, P.G., & Hubbard, E.M. (in preparation). Developmental changes in white matter tracts for symbolic and non-symbolic fractions.

Park, Y. & Cho, S. (2017). Developmental Changes in the Relationship between Magnitude Acuities and Mathematical Achievement in Elementary School Children. *Educational Psychology,* 37(*7*), 378-887.

Park, Y. & Cho, S. (2014). Comparing Construct and Predictive Validities of the Measurement of Children's Approximate Number Acuity Depending on Numerosity Comparison Task Format. *Korean Journal of Cognitive Sciences*, 25(2), 79-101.

Talks

Park, Y. & Matthews, P.G. (submitted). Ratio as a Part of Quantity. *Paper submitted as part of a symposium to Cognitive Science. Society, Toronto, Canada.*

Park, Y., Dean, D.3rd, Binzak, J.V., Matthews, P.G., & Hubbard, E.M. (submitted). Developmental Changes in White Matter Tracts for Symbolic and Non-Symbolic Fractions in primary school children. *Paper submitted as part of a symposium organized by Park. Y.* Neural Development of Symbolic Math Knowledge from Childhood to Young, *at Mathematical Cognition and Learning Society, Dublin, Ireland.*

Park, Y., Binzak, J.V., Toomarian, E.Y., Kalra, P., Matthews, P.G., & Hubbard, E.M. (April, 2019). Differences in processing symbolic vs. non-symbolic representations ratios: Behavioral and neural evidence. *Paper submitted as part of a symposium to American Education Research Association, Toronto, Canada.*

Park, Y., Binzak, J.V., Toomarian, E.Y. Kalra, P.B., Matthews, P.G., & Hubbard, E.M. (April, 2018). Developmental changes in children's processing of nonsymbolic ratio magnitudes: A cross-sectional fMRI study. Talk given at UW-Madison Waisman Center Brain Food Talks.

Park, Y. & Cho, S. (2013). Acuity for Continuous Magnitude but not Numerosity is Associated with Children's Mathematical Achievement. *CAU International Symposium on BK21 PLUS, Chung-Ang University, Seoul, Korea.*

Conference Presentations

Toomarian, E.Y., **Park, Y.**, Matthews, P.G., & Hubbard, E.M. (April, 2019). Spatial-numerical associations of fractions: Evidence from internal and external representations. *Paper submitted as part of a symposium to American Education Research Association,* Toronto, Canada.

Park, Y., Viegut, A.A., & Matthews, P.G. (March, 2019). The development of multiple non-symbolic ratio representations in children. *2019 Biennial Meeting on Society for Research in Child Development,* Baltimore, MD.

Viegut, A.A. **Park, Y.** & Matthews, P.G. (March, 2019). Number Line Estimation is More than Numerical: Evidence from Nonstandard Number Lines, *2019 Biennial Meeting on Society for Research in Child Development,* Baltimore, MD.

Matthews, P.G., Binzak, J.V., Kalra, P.B., **Park, Y.**, & Hubbard, E.M. (March, 2019). Perceptual Routes to Rational Numbers. *Paper submitted as part of a symposium to 2019 Biennial Meeting on Society for Research in Child Development,* Baltimore, MD.

Park, Y., Binzak, J.V., Dean, D.3rd, Alexander, A., Matthews, P.G., & Hubbard, E.M. (Sep, 2018). Developmental changes in white matter tracts for symbolic and non-symbolic fractions, *6th Biennial conference on International Mind, Brain and Education Society,* Los Angeles, CA.

Viegut, A.A. **Park, Y.**, Hubbard, E.M. & Matthews, P.G. (Sep, 2018). Differential improvement in fraction estimation in 2nd vs. 5th grade children: Longitudinal Analysis, *6th Biennial conference on International Mind, Brain and Education Society,* Los Angeles, CA.

Park, Y., Binzak, J.V., Toomarian, E.Y. Kalra, P.B., Matthews, P.G., & Hubbard, E.M. (July, 2018). Developmental changes in children's processing of nonsymbolic ratio magnitudes: A cross-sectional fMRI study, Poster presented at the *40th Annual Meetings on Cognitive Science Society*, Madison, WI.

Hubbard, E.M., Binzak, J.V., **Park, Y.**, Kalra, P.B., Toomarian, E.Y. (April, 2018). The ratio processing system underpins symbolic fraction understanding: Developmental neuroimaging investigations. *Paper submitted as part of a symposium to 1st Mathematical Cognition and Learning Society Conference.*

Binzak, J.V., **Park, Y**, Toomarian, E.Y., Kalra, P.B., Chuang, Y-S., Matthews, P.G., & Hubbard, E.M. (March, 2018). Neurocognitive Relationships between Nonsymbolic and Symbolic Ratio Processing in Children and Adults. Poster presented at *the 25th Annual Meeting of the Cognitive Neuroscience Society*, Boston, MA.

Kalra, P. Binzak, J.V., **Park, Y.**, Matthews, P.G. & Hubbard, E.M. (March, 2018). Developmental lateralization of non- symbolic ratio processing predicts fraction knowledge. Poster presented at *the 25th Annual Meeting of Cognitive Neuroscience Society Annual Meeting*, Boston.

Binzak, J.V., **Park, Y**., Toomarian, E.Y., Kalra, P., Matthews, P.G., & Hubbard, E.M. (October, 2017). Exploring the ratio processing system among primary school children: Behavioral and neural evidence. Poster presented at the *Cognitive Development Society,* Portland, OR.

Park, Y. & Matthews, P.G. (July, 2017). Proportional reasoning in the context of continuous vs. discretized: Adults go wrong where children go wrong, Poster presented at the *5th Annual Midwest Meeting on Mathematical Thinking,* Minneapolis, MN.

Park, I., **Park. Y.** & Cho, S (2016). Comparing the Influence of Numeracy, Positive and Negative Number Estimation on Financial Risky Decision Making. *Korean Society for Cognitive and Biological Psychology, Jeju, Korea*

Park, I., **Park. Y.** & Cho, S (2015). Comparing the Influence of Effect of Symbolic Number Estimation and Numeracy on Financial Risky Decision Making. *Society for Judgment and Decision Making, Chicago, IL.*

Park, I., **Park. Y.** & Cho, S (2015). Comparing the Influence of Numeracy and Symbolic Number Acuity on Financial Decision Making. *Korean Psychological Association Annual Conference, Seoul, Korea.*

Jang, S., **Park. Y.** & Cho, S. (2014). A Purer Measure of Number Acuity better predicts Mathematical Achievement. *Cognitive Neuroscience Society, Boston, MA.*

Park. Y., Jang, S. & Cho, S. (2014). Acuity for Continuous Magnitude but not Pure Numerosity correlates with Children's Math Achievement. *Cognitive Neuroscience Society, Boston, MA*.

Kim, N., Jang, S., Kweon, J., **Park. Y**., Chun, J. & Cho, S. (2014). Bias towards Continuous Magnitude influences performance on the Numerosity comparison task. *Cognitive Neuroscience Society, Boston, MA*.

Jang, S., **Park. Y**., Cho, S. (2014). The Longitudinal Study of the Relationship Between Approximate Number Sense and Mathematical Achievement. *Korean Society for Cognitive and Biological Psychology, Buyeo, Korea.*

Lee, K., **Park, Y.**, Jang, S., Cho, S. (2014). The Negative Influence of Math Anxiety and how it relates to Working Memory Load. *Cognitive Neuroscience Conference, Seoul, Korea*

Park, Y., Lee, Y., Lee, K. & Cho, S. (2014). Comparing the Acuities for Numerosity and Continuous Magnitude and their Correlations with Mathematical Achievement between Lower vs. Higher Grade Elementary School Children. *Korean Psychological Association Annual Conference, Seoul, Korea.*

Park, Y., Lee, D., Lee, K., Choi, Y., & Cho, S. (2014). Comparing Acuities for Length vs. Area and their Correlations with Mathematical Achievement in Primary School Children. *Korean Psychological Association Annual Conference, Seoul, Korea.*

Lee, K., **Park, Y.**, Jang, S., Cho, S. (2014). The Negative Influence of Math Anxiety and how it relates to Working Memory Load. *Korean Psychological Association Annual Conference, Seoul, Korea.*

Jang, S., **Park. Y.,** Cho, S. (2013). A Purer Measure of Number Acuity better predicts Mathematical Achievement, *CAU International Symposium on BK 21 PLUS 2013, Seoul, Korea.*

Jang, S., **Park. Y**., Kim, N., Kweon, J., Chun, J., Cho, S. (2013). Bias towards Continuous Magnitude influences performance on the Numerosity comparison task. *CAU International Symposium on BK 21 PLUS 2013, Seoul, Korea.*

Park, Y., Jang, S., & Cho, S. (2013). The Acuity for Numerosity vs. Continuous Magnitude and its Relationship to Mathematical Achievement in Elementary School Children. *Cognitive Neuroscience Conference*, Seoul, Korea.

Jang, S., **Park, Y.** & Cho, S. (2013). The Acuity for Numerosity vs. Continuous Magnitude and its Relationship to Mathematical Reasoning. *Korean Psychological Association Annual Conference, Daejeon, Korea*

Park, Y., Jang, S. & Cho, S. (2013). Acuity for Continuous Magnitude is associated with Mathematical Achievement in Early Elementary School Children. *Cognitive Neuroscience Society, San Francisco, CA.*

Park, Y. & Cho, S. (2012). Acuity for Continuous Magnitude is Associated with Mathematical Achievement in Early Elementary School Children. *2nd Doshisha and Chung-Ang Symposium of Psychological Science, Kyoto, Japan.*

Park, Y. & Cho, S. (2012). Two-dimensional Testing of Three-dimensionally Encoded Information Impairs Children's Recognition Memory. *Cognitive Neuroscience Conference*, *Seoul University, Korea*

Park, Y. & Cho, S. (2012). Two-dimensional Testing of Three-dimensionally Encoded Information Impairs Children's Recognition Memory. *Korean Psychological Association Annual Conference, Chuncheon, Korea*

RESEARCH

Project Assistant, UW-Madison, Supervisor: Drs. Edward Hubbard & Percival Matthews, 2016 - Current

Adjunct Researcher, Cognitive Neuroscience Lab, 2014 – 2016

Lab Coordinator, Cognitive Neuroscience Lab, Department of Psychology, Chung-Ang University, 2013-2014.

Research Assistant, Cognitive Neuroscience Lab, Department of Psychology, Chung-Ang University, Supervisor: Dr. Soohyun Cho, 2012-2014

Undergraduate Research Assistant, Cognitive Neuroscience Lab, Department of Psychology, Chung-Ang University, Supervisor: Dr. Soohyun Cho, 2012

Undergraduate Thesis, Department of Psychology, Chung-Ang University, Supervisor: Dr. Soohyun Cho, 2011-2012

TEACHING

Teaching Assistant, Ed Psych 326, Mind Brain Education, Department of Education Psychology, UW-Madison, Fall 2018 – Spring 2019

Teaching Assistant, Psychological Statistics, Department of Psychology, Chung-Ang University, Spring 2013

Teaching Assistant, Psychological Statistics, Department of Psychology, Chung-Ang University, Spring 2014

Mentoring

Undergraduate Mentor, mentoring Valerie Buroker, Biology152 project, UW-Madison, Fall 2019

Undergraduate Mentor, mentored Samantha Weinfurter, Biology152 project, UW-Madison, Fall 2019

Honors Thesis Mentor, mentored Monica Janz, UW-Madison, Fall 2018 – Spring 2019

Undergraduate Mentor, mentored jillian Aschenbrener and Adileen C. Sll, Biology152 project, UW-Madison, Spring 2019

Undergraduate Mentor, mentored Sarha Skinner, Biology152 project, UW-Madison, Fall 2018

Undergraduate Mentor, mentored Angela G. Schmidt, Biology152 project, UW-Madison, Spring 2018

Undergraduate Mentor, mentored Anna T. Ferrigan, Biology 152 project, UW-Madison, Fall 2017

Teaching Assistant, Psychological Statistics, Department of Psychology, Chung-Ang University, Spring 2013

Teaching Assistant, Psychological Statistics, Department of Psychology, Chung-Ang University, Spring 2014

ACADEMIC SERVICE

Research Chair, Members of Trainee Board in International Mind, Brain, and Education Society (IMBES), 2020 – Current

Ad hoc manuscript reviewer
Cognitive Development