

Jisun Kim

Virginia Tech

Department of Human Development and Family Science

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Education

Ph.D. Candidate Human Development and Family Science
2020- Present Virginia Tech, Blacksburg, VA
Advisor: Dr. Koeun Choi

M.A. Child Development and Family Studies
August 2019 Seoul National University, Seoul, Korea
Thesis: The relationship between five-year-olds' smart-media experience and social
competence: Focus on smart-media use time, parents' media literacy and smart-media
mediation
Advisor: Dr. KangYi Lee

B.A. Child Development and Family Studies / Social Welfare
February 2016 Seoul National University, Seoul, Korea

Exchange Student Social Works
February – July 2014 Taiwan National University, Taipei, Taiwan

Research Interests

My research interests center on understanding young children's use of and learning from interactive media technologies in a social context. I study how to integrate quality social interactions into existing and emerging technological tools (video chat, eBooks, touchscreens, interactive projectors, robots) to support children's cognitive development such as math/word learning, attention, and memory. I aim to provide scientific and practical knowledge on interactive media to guide researchers, parents, educators, and policymakers.

Publications

1. Yu, S., Choi, K., **Kim, J.**, Dong, J., Lee, Y., Haines, C., Newbill, P. L., Wyatt, A., Upthegrove, T., & Jeon, M. (submitted). Young children's interest, self-efficacy, and curiosity in robots throughout a child-robot musical theater program.
2. Dong, J., Choi, K., Yu, S., Lee, Y., **Kim, J.**, Vajir, D., Haines, C., Newbill, P. L., Wyatt, A., Upthegrove, T., & Jeon, M. (2023). A child-robot musical theater afterschool program for promoting STEAM education: A case study and guidelines. *International Journal of Human-Computer Interaction*, 1-17.
<https://doi.org/10.1080/10447318.2023.2189814>
3. **Kim, J.**, & Lee, K. (2019). Structural relationships among parents' media literacy, smart-media mediation, preschoolers' smart-media usage time, and social competence. *Korean Journal of Child Studies*, 40(6), 63-76.
<https://doi.org/10.5723/kjcs.2019.40.6.63>

Conference Proceedings

1. Hornburg, C. B., **Kim, J.**, Berry, C., & Elardo, G. (accepted). Considering new measures of children's and

parents' math attitudes and their associations with math performance. Proceedings of the 45th Anniversary of the Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education.

- Lee, Y., Wyatt, A., Dong, J., Upthegrove, T., Hale, B., Lyles, C. H., Choi, K., **Kim, J.**, Yu, S., Vajir, D., Newbill, P., & Jeon, M. (2022). Robot musical theater for climate change education. Proceedings of the 2022 *ACM/IEEE International Conference on Human-Robot Interaction*. Online.
<https://dl.acm.org/doi/pdf/10.5555/3523760.3523895>

Presentations

- McElveen, T. L., Powell, S. R., Hornburg, C. B., Mayes, A. S., **Kim, J.**, Quinn, K. A., Eiland, M., Schmitt, S. A., Andres-Salgarino, M. B., & Purpura, D. J. (2023, June). Using PULSE to improve problem solving with the four operations. Symposium presentation at the annual meeting of Mathematical Cognition and Learning Society, Loughborough, United Kingdom.
- Choi, K., Yu, S., **Kim, J.**, Dong, J., Lee, Y., Haines, C., Newbill, P., Upthegrove, T., Wyatt, A., & Jeon, M. (2023, April 13-16). Interactive stories through robot musical theater for preschoolers' STEAM education [Paper presentation]. The annual meeting of the American Educational Research Association, Chicago, IL. United States.
- Kim, J.**, Hornburg, C. B., McElveen, T., Grose, G., Berry, C., Elardo, G., Begley, C., Mayes, A., Miller-Cotto, D., Andres-Salgarino, B., Powell, S., Schmitt, S., & Purpura, D. (2023, March 23-25). *Examining gender differences in children's math identity and representations of mathematicians across elementary grades* [Poster presentation]. The biennial meeting of the Society for Research in Child Development, Salt Lake City, UT. United States.
- Kim, J.**, & Choi, K. (2023, March 23-25). *The impact of questions on preschoolers' learning from shared book reading over video chat* [Paper presentation]. The biennial meeting of the Society for Research in Child Development, Salt Lake City, UT. United States.
- Yu, S., Choi, K., **Kim, J.**, Dong, J., Lee, Y., Haines, C., Newbill, P., Upthegrove, T., Wyatt, A., & Jeon, M. (2023, March 23-25). *Robot musical theater for preschoolers' STEAM education: Effects on interest, self-efficacy, and curiosity in technology* [Paper presentation]. The biennial meeting of the Society for Research in Child Development, Salt Lake City, UT. United States.
- Hornburg, C. B., **Kim, J.**, Begley, C. V., McGregor, C. M., & Carrazza, C. (2022, June). Relations among caregivers' math engagement anxiety, math attitudes, math skills, and home mathematics activities with preschoolers. In L. Westerberg (Chair), *Homing in On Measurement: Novel Approaches to Scoring, Measuring, and Conceptualizing the HME*. Paper presented at the 5th Annual Meeting of the Mathematical Cognition and Learning Society (MCLS), Antwerp, Belgium.
- Kim, J.**, & Choi, K. (2022, April 20-22). *Q&A on Zoom for preschoolers: The impact of on-screen partner's questions on preschoolers' word learning and memory of content from shared book reading over video chat* [Poster presentation]. The biennial meeting of the Cognitive Development Society, Madison, WI, United States.
- Kim, J.**, & Choi, K. (2022, April 20). *Q&A on Zoom for preschoolers: The impact of on-screen partner's questions on preschoolers' word learning and memory of content from shared book reading over video chat*. [Poster presentation] Preconference Workshop on Digital Media and Cognitive Development at the biennial meeting of the Cognitive Development Society, Madison, WI, United States.
- Yu, S., Dong, J., **Kim, J.**, Lee, Y., Vajir, D., Lyles, C. H., Newbill, P., Upthegrove, T., Wyatt, A., Jeon, M., & Choi, K. (2022, April 22-23). *Sing, act, and dance with robots: A child-robot musical theater afterschool program for STEAM education*. [Poster presentation] The biennial meeting of the Cognitive Development Society, Madison, WI, United States.
- Choi, K., **Kim, J.**, Shin, E., Smith, C. L. (2021, April 7-9). *Maternal media beliefs moderate the relation between parenting stress and toddlers' screen use* [Poster presentation]. The virtual biennial meeting of the

Society of Research in Child Development, Minneapolis, MN, United States.
<https://www.srcd.org/event/srcd-2021-biennial-meeting>

11. Yoo, Y., **Kim, J.**, & Lee, K. (2019, May 10). *The effects of paternal and maternal family integrity co-parenting on children's peer play interaction: The role of children's social skills* [Poster presentation]. The 2019 United Nations Sustainable Development Goals 4.2 Joint Conference, Seoul, South Korea.

Research / Work Experience

- August 2021 - present Graduate Research Assistant in Learning and Development Lab, Virginia Tech
 Department of Human Development and Family Science (Supervisor: Dr. Caroline Hornburg)
- Research on mathematical cognition and math skills in early and middle childhood
- 2020 - present Graduate Research Assistant in Cognitive Developmental Science Lab, Virginia Tech
 Department of Human Development and Family Science (Supervisor: Dr. Koeun Choi)
- Research on the role of technology in young children's cognitive development
- March 2016 - February 2018 Lead Teacher - Zelkova Day Care Center
 Seoul National University Center for Child Educare Service & Research, Seoul, South Korea
- January 2015 Social Work Practice – Visang Adolescent Mental Health Center
 Seoul, South Korea

Research Support

- February 2023 - February 2024 Institute for Creativity, Arts, and Technology (ICAT) Steve and Karen Johns/CENI SEAD Grant - \$3,000 Virginia Tech
 Proposal: Shared book reading with an AI voice assistant for preschoolers' mathematical language learning
 Role: **Designated student** (PIs: Koeun Choi, Myounghoon Jeon, Caroline Hornburg, Shannon Mury)
- June 30, 2023 - June 30, 2024 Institute for Creativity, Arts, and Technology (ICAT) and Institute for Society, Culture, and Environment (ISCE) Grant - \$30,000 Virginia Tech
 Proposal: Integrating AI voice assistants into touchscreens for young children's interactive math learning
 Role: **Designated student** (PIs: Koeun Choi, Sang Won Lee, Jinjing Jenny Wang)

Teaching Experience

- Spring 2023 Graduate Teaching Assistant (HD 5714: Regression)
- Led HD 5974 Regression Lab course: run various regression analyses using SPSS & R skills
- Fall 2022 Graduate Teaching Assistant (HD 5514: Research Methods)
- Led HD 5974 Research Methods Lab course: practice SPSS & R skills
- Fall 2022 Guest Instructor (EDEC 445: Administration of Programs for Young Children)
 Radford University (Instructor: Dr. Boyoung Park)
 Q&A on Zoom for preschoolers: The impact of on-screen partners' questions on preschoolers' word learning and memory of content from shared book reading over video

chat (10/28/22)
 Spring 2022 Guest Instructor (EDEC 445: Administration of Programs for Young Children)
 Radford University (Instructor: Dr. Boyoung Park)
 Q&A on Zoom for preschoolers: The impact of on-screen partners' questions on
 preschoolers' word learning and memory of content from shared book reading over video
 chat (3/30/22)
 Spring 2021 Instructor of Record (HD 1004: Human Development)
 Fall 2020 Graduate Teaching Apprentice (Supervisor: Dr. Caroline Hornburg)

Service

Spring 2023 VT Science Festival Session Organizer
 Spring 2022 Child-Robot Program Instructor in CDCLR at Virginia Tech
 Fall 2021 Student Reviewer for the 2022 SRA Biennial Meeting (Mentor: Dr. Koeun Choi)
 Fall 2021 VT Science Festival Session Organizer
 Fall 2021 Child-Robot Afterschool Program Instructor at Eastern Montgomery Elementary School
 Spring 2021 - Present Korean American Early Childhood Researchers (KAECRA) Regional Student
 Representative
 Fall 2020 Student reviewer for the 2021 SRCD Biennial Meeting (Mentor: Dr. Koeun Choi)
 Fall 2020 VT Science Festival Session Organizer
 Fall 2020 - Present Sunday School Teacher at Korean Baptist Church of Blacksburg

Awards and Academic Honors

2023 Graduate Research and Development Program (GRDP) Dissertation Award (\$850)
 2023 Virginia Tech HDFS Travel Fund (\$600)
 2023 SRCD Graduate Student Travel Award (\$300)
 2023 Virginia Tech Graduate School Travel Fund (\$300)
 2022 Virginia Tech HDFS Travel Fund (\$1000)
 2021 Harper Scholarship (\$985)
 2021 Virginia Tech HDFS Travel Fund (\$50)
 2019 Brain Korea 21 Plus Research Scholarship
 Fall 2014 Human Development & Family Studies Academic Scholarship
 Spring 2014 SoonHyung Yi Scholarship
 Spring 2014 SNU Study Abroad Scholarship
 Spring 2011 National Fellowship for Humanities for undergraduate study
 -Fall 2013

Professional Memberships

2022 - Present Member, Cognitive Development Society (CDS)
 2020 - Present Member, Society for Research on Child Development (SRCD)

Additional Training and Qualifications

August 2018 Research Methodology Workshop by Korean Home Management Association:
 Understanding and Practice of TextMining & SNA for Big Data Analysis
 March 2016 Childcare Teacher Certification issued by Korean Ministry for Health & Welfare
 April 2016 Social Worker Certification issued by Korean Ministry for Health & Welfare
 October 2014 Psychological Testing Workshop by Korean Association of Child Studies