# TESS GAVRIELLE LEVINSON

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# **Education**

Spring 2024 (Expected Defense)	<b>Ph.D.</b> , Boston College Lynch School of Education and Human Development <b>Department:</b> Applied Developmental and Educational Psychology <b>Dissertation:</b> Teacher Beliefs on School-Readiness and Play with a Kindergarten Coding Curriculum: A Mixed-Methods Study in the United States and Argentina
2022	M.A., Tufts University Department: Eliot-Pearson Department of Child Study and Human Development Thesis: Quantifying the Coding Playground: A Pilot Study Creating and Attempting to Validate a Rubric for Positive Technological Development
2018	<b>B.S.</b> , Vanderbilt University <b>Majors:</b> Cognitive Studies (Department of Psychology and Human Development) & Disability Studies (Department of Special Education) <b>Thesis:</b> Stereotype Threat, Math Anxiety, and the Development of Gendered Stereotypes

#### **Honors and Awards**

2022	Tufts GSAS Travel Award
2021	Honorable Mention, NSF Graduate Student Research Fellowship
2020 - 2022	Tufts Provost Fellow Award
2018	Excellence in Cognitive Studies Award, Peabody College, Vanderbilt University
2014 - 2018	Cornelius Vanderbilt Scholarship

2022

#### **Journal Articles**

**Levinson, T.,** Carocca P., F., & Bers, M. Coding as another language: An early childhood programming curriculum in Argentina. (Manuscript under review).

Levinson, T. & Bers, M. Robotics in Universal Prekindergarten Classrooms. (Manuscript under review).

Didier, P. R., Moore, T. M., Calkins, M. E., Prettyman, G., **Levinson, T.,** Savager, C., & Wolf, D. H. (2023). Evaluation of a new intrinsic and extrinsic motivation scale in youth with psychosis spectrum symptoms. *Comprehensive Psychiatry*, 127.

Bers, M. U., Blake-West, J., Kapoor, M. G., **Levinson, T.,** Relkin, E., Unahalekhaka, A., & Yang, Z. (2023). Coding as another language: Research-based curriculum for early childhood computer science. *Early Childhood Research Quarterly*, 64, 394–404. https://doi.org/10.1016/j.ecresq.2023.05.002

**Levinson, T.,** Prettyman, G., Savage, C., White, L., Moore, T. M., Calkins, M. E., ... & Wolf, D. H. (2023). Activation of Internal Correctness Monitoring Circuitry in Youths With Psychosis Spectrum Symptoms. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.

Prettyman, G., **Levinson, T.,** Kable, J., Satterthwaite, T. D., Davatzikos, C., Shinohara, R., Calkins, M. E., Elliott, M., Gur, R. C., & Gur, R. E. (2020). Reward System Dysfunction and Impaired Intrinsic Motivation in Adolescents With Psychosis Risk. *Biological Psychiatry*, 87(9), S333–S334.

# **Conference Proceedings**

Ben-Ari, A., **Levinson, T. G.**, Umaschi Bers, M., & Rosenberg-Kima, R. B. (2023). *Coding as a Self-Expression Tool*. In SIGCSE 2023: Proceedings of the 54th ACM Technical Symposium on Computer Science. 1266–1266. https://doi.org/10.1145/3545947.3573244

**Levinson, T.,** Gonzalez, P., Gonzalez, H., Gimenez, C., & Bers, M. (June 2023). Coding as Another Language in Argentina. In Coding as Another Language: An International Comparative Study of Learning Computer Science and Computational Thinking in Kindergarten. *Proceedings of the 17th International Conference of the Learning Sciences-ICLS 2023*, (pp. 1659–1665). https://2023.isls.org/proceedings/

#### **Other Publications**

**Levinson, T.** (August 2023). "Reconstructing the World, One Megabyte at a Time." *URJ 6 Points SciTech Academy Blog.* [Blog]

**Levinson, T.,** & Bers, M. U. (2022). Horizons for Homeless Children CAL-KIBO-PreK Pilot Program Research Findings Report. [Report].

**Levinson, T.,** Hunt, L., & Hassenfeld Z. (June 2021). Including students with disabilities in the coding classroom. In M. U. Bers (Ed.), *Teaching computational thinking and coding to young children*, (pp. 236-248). IGI Global. 10.4018/978-1-7998-7308-2

# **Presentations**

**Levinson, T.,** Carocca P., F., & Bers, M. International Scaling of the Coding as Another Language Curriculum through a Research-Practice Partnership in Argentina. (Accepted for April 2024). American Educational Research Association (AERA), Philadelphia, USA.

**Levinson, T.** & Bers, M.U. (April 2023). *Don't Assume Deficit: Disability, Coding, and Computational Thinking in Early Elementary School.* American Educational Research Association Annual Meeting, Chicago, IL.

**Levinson, T.** & Bers, M.U. (April 2023). *Coding Languages: Coding and Computational Thinking in a Language-Diverse Preschool.* American Educational Research Association Annual Meeting, Chicago, IL.

Ben Ari, A., **Levinson, T.,** Bers, M. U., & Rosenberg-Kima, R. B. (2023). *Nurturing Computational Thinking in an Israeli Kindergarten with the CAL-KIBO Robotics Curriculum*. American Educational Research Association, Chicago, IL.

Blake-West, J., **Levinson, T.,** & Nievera, M. (July 2022). *Co-Creating Pathways from ScratchJr to Scratch*. Scratch Conference, Cambridge, MA. (Co-presented by all authors)

**Levinson, T.** & Bers, M.U. (April 2022). *Student Centered Computational Thinking for Children with Disabilities*. American Educational Research Association Annual Meeting, San Diego, CA.

**Levinson, T.** & Bers, M.U. (April 2022). *Contrasting Perspectives in Computational Thinking Special Education*. American Educational Research Association Annual Meeting, San Diego, CA.

**Levinson, T.** (April 2022). *Early Findings from CAL-KIBO at Horizons for Homeless Children*. Fred Rothbaum Student Presentation Day, Medford, MA.

Didier, P., Prettyman, G., **Levinson, T.**, Kable, J., Satterthwaite, T., Davatzikos, C., Shinohara, T., Calkins, M. E., Elliott, M., Gur, R. E., Gur, R. C., & Wolf, D. H. (December 2021). *Impaired Intrinsic Motivation in Young People at Risk for Psychosis*. American College of Neuropsychopharmachology, San Juan, PR.

Blake-West, J., **Levinson, T.,** & Dubash, P. (July 2021). *Coding as Another Language – ScratchJr*. Scratch Conference, Cambridge, MA. (Co-presented by Jessica Blake-West, Tess Levinson, & Parastu Dubash)

Unahalekhaka, A. & **Levinson, T.** (April 2021). *I Like Your Green Grass: Early Childhood Coding Collaboration During Pandemic Learning*. Fred Rothbaum Student Presentation Day, Medford, MA. (Copresented by Aim Unahalekhaka and Tess Levinson)

**Levinson, T.**, Prettyman, G., Satterthwaite, T., White, L., Moore, T. M., Calkins, M. E., Ruparel, K., Gur, R. E., Gur, R. C., & Wolf, D. H. (August 2019). *Development of Internal Performance Monitoring Circuitry in Adolescents with and without Subclinical Psychosis Symptoms*. Flux Congress, New York, NY.

**Levinson, T.**, Prettyman, G., Satterthwaite, T., White, L., Moore, T. M., Calkins, M. E., Ruparel, K., Gur, R. E., Gur, R. C., & Wolf, D. H. (April 2019). *Activation of Internal Performance Monitoring Circuitry is Reduced in Youth with Psychosis Spectrum Symptoms*. LiBI Symposium, Philadelphia, PA.

**Levinson, T.**, Prettyman, G., Satterthwaite, T., White, L., Moore, T. M., Calkins, M. E., Ruparel, K., Gur, R. E., Gur, R. C., & Wolf, D. H. (December 2018). *Activation of Internal Performance Monitoring Circuitry is Reduced in Youth with Psychosis Spectrum Symptoms*. American College of Neuropsychopharmachology, Hollywood, FL. (Presented by Daniel Wolf)

Prettyman, G. E., **Levinson, T. G.**, Shankar, S., Satterthwaite, T., Davatzikos, C., Bilker, W., Elliott, M., Ruparel, K., Kable, J., Wolf, D. H. (December 2018). *Abnormal ventral striatum activation during effort discounting correlates with clinical amotivation severity in schizophrenia*. American College of Neuropsychopharmachology, Hollywood, FL.

**Levinson, T.**, Hong, C., & Fazio, L. (May 2018). *Math Anxiety, Stereotype Threat, and Gender Stereotypes*. Vanderbilt Psychology Day, Nashville, TN.

# **Research Experience**

## **Doctoral Research Assistant**

DevTech Research Group

PI: Dr. Marina Bers

Lynch School of Education and Human Development, Boston College, Chestnut Hill, MA Eliot-Pearson Department of Child Studies and Human Development, Tufts University, Medford, MA September 2020 – Present

• Co-wrote curricula for PreK through 2<sup>nd</sup> grade incorporating computer science and robotics learning with literacy, approaches to learning, social emotional learning, and character strengths development.

- Partner with local and international community organizations to implement and research early childhood curricula including leading in-person and virtual trainings; designing research instruments; overseeing data collection; analyzing data using qualitative, quantitative, and mixed methodologies; and writing reports for stakeholders.
- Develop Positive Technological Development observational rubrics for classrooms, teachers, and student behavior.

\*Prof. Bers, the DevTech Research Group, and I moved to Boston College from Tufts in Fall 2022

#### **Clinical Research Coordinator**

Brain and Behavior Laboratory, Department of Psychiatry

PI: Dr. Daniel Wolf

Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA

May 2018 – July 2020

- Managed ongoing R01 grant studying amotivation and psychosis spectrum disorders, including organization of regulatory and financial paperwork, participant enrollment, and data
- Ran participant visits consisting of behavioral tasks, fMRI tasks, and clinical interviews
- Organized, preprocessed, and analyzed clinical and fMRI data using R, MATLAB, and FSL
- Presented first-author posters examining fMRI and behavioral correlates of internal performance monitoring and psychosis spectrum symptoms across adolescence

## **Undergraduate Honors Thesis**

Department of Psychology and Human Development

PI: Dr. Lisa Fazio

Peabody College, Vanderbilt University, Nashville, TN

May 2016 – May 2018

- Devised the research question for an experiment to investigate the interaction of math anxiety and gender-based stereotype threat on middle school math performance
- Developed research protocols for the study including data collection, coding, and analysis
- Coded data in Excel and SPSS; Conducted statistical analysis using ANOVA models.

## **Undergraduate Research Assistant**

Building Knowledge Lab, Department of Psychology and Human Development

PI: Dr. Lisa Fazio

Peabody College, Vanderbilt University, Nashville, TN

January 2015 – April 2016

- Worked under Dr. Lisa Fazio on projects studying children's math learning and memory
- Coded behavioral and performance data from videos and surveys
- Organized data in preparation for statistical analysis and for communication with school administrators

# **Education & Applied Experience**

## Youth Participatory Action Research (YPAR) Fellowship Organizer

Union For Reform Judaism: Youth Organizing Team and Religious Action Center of Reform Judaism June 2023-Present

• Developed and piloted a values-based YPAR program for eleventh and twelfth grade students located in regions across the country, including biweekly virtual programming and an in-person retreat.

- Created and adapted existing YPAR resources and methodologies to support students with disabilities and a hybrid model of instruction.
- Facilitated the Youth Organizing Team's and the RAC's first research initiative, including training staff on research practices and serving as PI for the IRB protocol.

#### **Lead Instructor**

URJ Six Points Sci Tech Academy, Byfield, MA October 2019 – Present

- Developed project-based two-week curriculum for students entering grade 11 emphasizing integration of social action with STEM.
- Developed cognitive psychology and neurosciences curriculum emphasizing student-led experiment design for students entering grades 5-10, and transitioned curriculum to remote format for virtual camp programming.
- Mentored college-age staff in developing summer curricula, creating lesson plans, and teaching, as well as with graduate school plans and applications.

#### **Service**

#### **Ad-hoc Reviewer**

Early Childhood Research Quarterly International Journal of Child-Computer Interaction

#### **Department Service**

**Tufts University Doctoral Student Voices** Service Co-Chair May 2021-May 2022

#### **Community Involvement**

**URJ 6 Points Sci-Tech Academy** Camp Superhero, Alumni Committee July 2019 – Present

#### Special Olympics of Pennsylvania – Philadelphia

Social Events Co-Chair, Young Professionals Committee November 2018 – August 2021