## **AVITAL PELAKH**

### **CURRICULUM VITAE**

#### PERSONAL INFORMATION

5417 Guarino Rd Phone: (406) 579-5714 Pittsburgh, PA 15217 Email: AVP36@pitt.edu

#### **EDUCATION**

University of Pittsburgh

Ph.D., Psychology, Cognitive Program Expected 2026

Minor in Quantitative Methodology

Advisor: Timothy Nokes-Malach

University of Pittsburgh

M.S., Psychology, Cognitive Program 2023

Committee: Timothy Nokes-Malach (chair), Brian Galla,

Scott Fraundorf, Kevin Binning

Montana State University

B.S., Psychology 2020

Honors: Graduated with High Honors

### **HONORS AND AWARDS**

- Dietrich School of Arts and Sciences Graduate Fellowship 2020-2021, University of Pittsburgh
- Undergraduate Scholars Program Award Recipient Fall 2019, Montana State University
- Psi Chi International Honor Society in Psychology October 2019
- Lea Miller Memorial Psychology Scholarship 2019-2020, Montana State University
- Robin Mason Memorial Scholarship 2019-2020, Montana State University
- The Honor Society of Phi Kappa Phi January 2019
- Montana State University President's Honor Roll: 2018 2020

#### RESEARCH INTERESTS

- Educational interventions targeting reasoning processes, metacognition, and emotions during learning and problem solving.
- Data visualization, quantitative methods, and science communication.

### **PROFESSIONAL AFFILIATIONS**

- Learning Research and Development Center, University of Pittsburgh
- Cognitive Science Learning Laboratory, University of Pittsburgh
- Cognitive Science Society Member
- Psychonomic Society Member

## JOURNAL PUBLICATIONS (PEER REVIEWED)

- Galla, B., Karanam, A., Pelakh, A., & Goldberg, S. B. (2024) Adolescents do not benefit from universal school-based mindfulness interventions: a reanalysis of Dunning et al. (2022). *Frontiers in Psychology*, https://doi.org/10.3389/fpsyg.2024.1384531
- Kalinowski, S. T., & **Pelakh, A.** (2023). A hypothetico-deductive theory of science and learning. *Journal of Research in Science Teaching*, 1-27. https://doi.org/10.1002/tea.21892

#### MANUSCRIPTS IN PREPARATION OR UNDER REVIEW

- **Pelakh, A.,** Good, M. L., Kuo, E., Tumminia, M. J., Jahanian, S., Nokes-Malach, T., Galla, B. (in prep). Psychological threat and problem solving in physics: Relations and effects of mindfulness training as an intervention.
- **Pelakh, A.,** Good, M. L., Kuo, E., Tumminia, M. J., Jamal-Orozco, N., Adelman, A., Nokes-Malach, T., Galla, B. (in prep). Thematic analysis of student perceptions of resources and demands experienced in introductory physics.
- Benson-Greenwald, T. M., **Pelakh, A.**, Tumminia, M. J., Jahanian, S., Diamond, M., Kuo, E., Good, M. L., Nokes-Malach, T., Galla, B. (in prep). RAINing in the physics stress: Mindfulness training reduces psychological threat.

### **CONFERENCE PRESENTATIONS (EXTERNAL)**

- \*Postbaccalaureate advisee
- \*Langley, T., **Pelakh, A.**, Benson-Greenwald, T. M., Tumminia, M. J., Jahanian, S., Kuo, E., Galla, B. M., Nokes-Malach, T. (2023, November). *Does Mindfulness Promote Student Beliefs About Transfer?* Poster presented at the Annual Meeting of the Psychonomic Society, San Franscisco, CA.
- Benson-Greenwald, T. M., Galla, B., Nokes-Malach, T., Kuo, E., Good, M., Tumminia, M., **Pelakh, A.**, & Jahanian, S. (2023, April). *Engaging mindfully: Mindfulness training promotes psychological engagement in physics*. Oral presentation given at the 94<sup>th</sup> Annual Meeting of the Midwestern Psychological Association, Chicago, IL.

- Galla, B. M., Tumminia, M. J., **Pelakh, A.**, Jahanian, S., Good, M. Kuo, E., Nokes-Malach, T. (2023, February). *Can mindfulness training support college students' stress management, mental health, and engagement?* Poster presented at the annual conference of the International Society for Contemplative Research (ISCR), San Diego, CA.
- **Pelakh, A.,** Good, M. L., Kuo, E., Tumminia, M. J., Jahanian, S., Nokes-Malach, T., Galla, B. (2022, November 19). Testing associations between mindfulness training, psychological threat, and perceptions of confidence, difficulty, and anxiety during problem solving. Talk presented at the 63<sup>rd</sup> Annual Meeting of the Psychonomic Society, Boston, MA.
- Good, M.L., **Pelakh, A.,** Galla, B., Nokes-Malach, T., Tumminia, M. J., Hinshaw, K., Jahanian, S., Kuo, E. (2022, July 13-14). *Psychological Threat and Demands in an Introductory Physics Class*. Poster presented at the Physics Education Research Conference, Grand Rapids, MI.
- **Pelakh, A.**, Good, M. L., Kuo, E., Tumminia, M. J., Jahanian, S., Nokes-Malach, T., Galla, B. (2022, April 4-5). *Examining associations between stress appraisals, problem categorization, and solution times in undergraduate physics students*. Poster presented at the Center for Integrative Research on Cognition, Learning, and Education Conference, St. Louis, MO.
- **Pelakh, A.**, Good, M. L., Kuo, E., Nokes-Malach, T., Tumminia, M. J., Jamal-Orozco, N., Diamond, M. S., Adelman, A., Galla, B. (2021, July 26-29). *The relationship between intelligence mindset and test anxiety as mediated by effort regulation*. Poster presented at the 43<sup>rd</sup> Annual Meeting of the Cognitive Science Society.
- **Pelakh, A.**, Kalinowski, S. T., & Hutchison, K. A. (2020, March). *Heuristics and Biases in Scientific Reasoning*. Poster accepted at the Rocky Mountain Psychological Association Annual Convention, Denver, CO. (Conference canceled)
- McNamee, M., Brito, J., **Pelakh, A.**, Gameon, J. A., & Skewes, M. C. (2020, March). *Associations between historical trauma, quality of life, and substance use among American Indians in rural Montana*. Poster accepted at the National Conference on Undergraduate Research Conference, Bozeman, MT. (Conference canceled)
- **Pelakh, A.**, Kalinowski, S. T., & Hutchison, K. A. (2020, March). *Heuristics and biases in scientific reasoning*. Poster accepted at the National Conference on Undergraduate Research, Bozeman, MT. (Conference canceled)

## **CONFERENCE PRESENTATIONS (INTERNAL)**

\*Undergraduate advisee

- **Pelakh, A.** (2024, October). A case study in experiment refinement: Identifying effects of mindfulness training on motivation and engagement in introductory physics. Talk presented at the Cognitive Talks Series, Department of Psychology, University of Pittsburgh.
- **Pelakh, A.** (2024, March). *Creating dynamic data visualizations with Shiny in R*. Talk presented at the CAMeL (Community for Advanced Methodological Learning) Talks Series, Department of Psychology, University of Pittsburgh.

- **Pelakh, A.** (2024, January). A mixed-methods analysis of student experiences in introductory physics. Talk presented at the Cognitive Talks Series, Department of Psychology, University of Pittsburgh.
- **Pelakh, A.**, Good, M., Kuo, E., Tumminia, M. J., Jahanian, S., Nokes-Malach, T., & Galla, B. (2023, November). *Investigating the relations between mindfulness training, psychological threat, and physics problem solving*. Poster presented at the Learning Research and Development Center Board of Visitors, Pittsburgh, PA.
- **Pelakh, A.** (2023, March). Does mindfulness training affect students' perceptions during problem solving? Results from a randomized controlled trial among undergraduate physics students reporting psychological threat. Talk presented at the Cognitive Talks Series, Department of Psychology, University of Pittsburgh.
- **Pelakh, A.** (2022, March). Examining associations between stress appraisals, problem categorization, and solution times in undergraduate physics students. Talk presented at the Cognitive Talks Series, Department of Psychology, University of Pittsburgh.
- \*Zewail, A., **Pelakh, A.** (2021, August). *The Role of Psychological Framing and Effort in Physics Courses*. Poster presented at the Learning Research and Development Center Summer Undergraduate Internship Poster Session, Pittsburgh, PA.
- **Pelakh, A.** (2021, April). Slow down, you're moving too fast: Psychological threat, mindfulness, and problem solving behaviors in physics. Talk presented at the Cognitive Talks Series, Department of Psychology, University of Pittsburgh.
- **Pelakh, A.**, Kalinowski, S.T., & Hutchison, K.A. (2019, December). *Heuristics and Biases in Scientific Reasoning*. Poster presented at the Montana State University Student Research Celebration, Bozeman, MT.

### INVITED PROFESSIONAL DEVELOPMENT PANELS AND TALKS

- **Pelakh, A.** (2024, July). *Introductory Statistics Workshop*. Talk presented at the Learning Research and Development Center Summer Internship Program. University of Pittsburgh, Pittsburgh, PA.
- **Pelakh, A.** (2023, July). *Introductory Statistics Workshop*. Talk presented at the Learning Research and Development Center Summer Internship Program. University of Pittsburgh, Pittsburgh, PA.
- **Pelakh, A.** (2022, July). *Correlations and Linear Regression Models*. Talk presented at the Learning Research and Development Center Summer Internship Program. University of Pittsburgh, Pittsburgh, PA.

## PROFESSIONAL EXPERIENCE

## **Macmillan Learning**

Independent Contractor (Fall 2023 – Spring 2024)

Conducted in-person and virtual classroom observations for a research project focused on supporting sense of belonging and metacognition. The project is funded by a grant from the Bill and Melinda Gates Foundation to support evidence-based teaching practices.

### **TEACHING EXPERIENCE**

# PSY 422: Cognitive Psychology, University of Pittsburgh

Teaching Assistant (250 students; Spring 2023)

Graded open-response quizzes and research posters, replied to student emails, developed R code and data structure to analyze student submissions, supervised undergraduate TA, provided feedback on instructional design.

### MENTORING AND ADVISING EXPERIENCE

University of Pittsburgh (10 Students)

# **Master's Students (1)**

Kristen Hinshaw

### Post-Baccalaureate Fellows (1)

Tyree Langley

### **Undergraduate Research Assistants and Teaching Assistants (7)**

Jordann Antoan

Keely Lombardi

Kayla Tupper

Alexi Zukas

**Brennon Paik** 

Alex Luong

Irene Hong

Aishwarya Karanam

## Learning Research and Development Center Summer Undergraduate Interns (1)

Aliah Zewail

### **SERVICE**

## **Community**

## University of Pittsburgh, Departmental

Cognitive Faculty Search Committee, Member Fall 2024
Graduate Student Organization, Psychology Representative Communications Committee, Member 2022 - Present Cognitive Talks Series, Student Coordinator Fall 2021

#### **CERTIFICATIONS**

Four-Course Specialization in Python Scripting – Coursera (2023)

- Click here to view certificate
- Topics covered: Python programming essentials, Python data representations, Python data analysis, Python data visualization

## CITI Training Program:

- Social and Behavioral Science Human Subjects: Social-Behavioral-Educational Course (2020)
- GCP Social and Behavioral Research Best Practices for Clinical Research (2020)
- Responsible Conduct of Research (2019)

#### **SKILLS**

- Programming Languages: R (highly proficient; including interactive applications with Shiny), Python (proficient), HTML (proficient), CSS (proficient), JavaScript (proficient)
- Creative: Photography, Videography, Audio Production
- Software and Integrated Development Environments: R Studio, Qualtrics, SPSS, Microsoft Office, Adobe Creative Cloud (Premiere, After Effects, Lightroom, Photoshop, Illustrator, Audition, InDesign)

#### **LANGUAGES**

- English native language
- Russian fluent speaker

## REFERENCES

# Timothy J. Nokes-Malach, Ph.D.

Professor, Psychology and Learning Sciences & Policy Senior Research Scientist, Learning Research and Development Center University of Pittsburgh nokes@pitt.edu

# Brian M. Galla, Ph.D.

Associate Professor, Applied Developmental Psychology, School of Education Research Scientist, Learning Research and Development Center University of Pittsburgh <a href="mailto:gallabri@pitt.edu">gallabri@pitt.edu</a>

# Joseph P. Yurko, Ph.D.

Senior Leader, Process Modeling & Analytics Arconic Technology Joseph.Yurko2@arconic.com

# Scott Fraundorf, Ph.D.

Associate Professor, Psychology University of Pittsburgh sfraundo@pitt.edu

## Steven Kalinowski, Ph.D.

Professor, Ecology Montana State University skalinowski@montana.edu

## Monica Skewes, Ph.D.

Professor, Psychology Montana State University monica.skewes@montana.edu