Avital Pelakh

SUMMARY

Experimental researcher with training in cognitive science and advanced quantitative analysis; Experience working with multidisciplinary teams and communicating complex findings to technical and non-technical audiences.

Research areas/Expertise: learning; reasoning; problem solving; motivation

EDUCATION

PhD	University of Pittsburgh, Cognitive Psychology	Expected 2026
	Minor in Quantitative Methodology	
MS	University of Pittsburgh, Cognitive Psychology	2023
BS	Montana State University, Psychology	2020

RELEVANT WORK EXPERIENCE

Graduate Student Researcher, Learning Research and Development Center, University of Pittsburgh

2020-pres.

Experimental Study: Mindfulness Training to Increase Learning and Engagement in Introductory Physics (link)

- <u>Data</u>: observational survey data from ~3000 students; Repeated-measures experimental data from ~450 students; Qualitative focus group interviews from 24 students
- Responsibilities:
- Data collection and management (participant interaction, quality assurance, organization, reporting)
- Design implementation (experimental stimuli, online surveys, logic and randomization, programming)
- Data analysis (coding, psychometrics, generalized linear modeling, mixed effects modeling, visualization)
- Mentoring and team management
- Key contributions:
- Redesigned data collection procedures and survey design to increase accuracy and efficiency
- Wrote custom code expand range of behavioral measures collected

Independent Research Contractor, Macmillan Learning

2023-2024

Conducted in-person and virtual qualitative classroom observations

SKILLS

Methodology

- Experimental design; AB Testing
- Survey design
- Data cleaning; manipulation
- Data visualization; dashboards
- Statistical modeling
- Machine learning techniques
- Causal inference; hypothesis testing

Programming Languages and Tools (**advanced, *proficient)

- R and R Studio**
 - dplyr, ggplot2, shiny, etc.
- Python*
 - pandas, numpy, matplotlib, seaborn
- Databases/SQL*
- JavaScript*

- Qualtrics **
- Jupyter Notebook*
- HTML/CSS*
- GitHub*
- SPSS*
- NVivo*

COMMUNICATION AND LEADERSHIP

Writing

- Co-authored research articles published in peer-reviewed academic journals (2 total; links: 1, 2)
- Research articles in preparation or under review (3 first author, 4 total)

Research Presentations (posters and talks)

Internal at university (8 first author, 9 total); external at national/international conferences (5 first author, 10 total)

Teaching and Mentoring

- Workshops Led: Statistics training for undergraduate interns (3); Interactive data visualization for CAMeL (1)
- Teaching Assistant: Cognitive Psychology (250 students)
- Mentoring and Advising: Post-Bac/Master's (2 students); Undergraduate Intern/RA (8 students)

ADDITIONAL SKILLS AND DISTINCTIONS

- Languages: English (fluent); Russian (conv.)
- Dietrich School of Arts and Sciences Graduate Fellowship (2020-2021)
- A/V Production; Editing; Graphic Design