Holly A. Zaharchuk

PhD Candidate (she/her)

University Park, Pennsylvania, United States

✉ hzaharchuk@psu.edu | 🏠 www.hzaharchuk.com | 🆔 0000-0002-7693-7807 | 🖥 hollzzar

Research interests

My research interests lie at the intersection of cognitive psychology and sociolinguistics. I use neuropsychological (EEG) and behavioral methods to understand how linguistic, cognitive, and social factors interact during language processing. My particular areas of study include phonetic and syntactic variation, bilingual code-switching, and network models of language.

Education

The Pennsylvania State University   *University Park, Pennsylvania*

PH.D., PSYCHOLOGY AND LANGUAGE SCIENCE, SPECIALIZATION IN COGNITIVE AND AFFECTIVE NEUROSCIENCE   *2018 - present*

- Advisor: Dr. Janet G. van Hell
- Dissertation: *Cross-language transfer in voice onset time: A window into perceptual adaptation in brain and behavior*

The Pennsylvania State University   *University Park, Pennsylvania*

M.S., PSYCHOLOGY   *2018 - 2020*

- Advisor: Dr. Janet G. van Hell
- Master's thesis: *We "might could" revisit syntactic processing: Studying dialectal variation with event-related potentials*

The University of Chicago   *Chicago, Illinois*

B.A., PSYCHOLOGY, MINOR IN LINGUISTICS   *2011 - 2015*

- Advisor: Dr. Daniel Casasanto
- Honors thesis: *Does linguistic experience change mental representations of pitch?*

Honors and awards

Doctoral Dissertation Research Improvement Grant (Ling-DDRI)   *The Pennsylvania State University*

NSF GRANT SUPPORTING DOCTORAL RESEARCH ON HUMAN LANGUAGE   *Feb 2023 - Dec 2023*

Partnerships for International Research and Education Fellowship (PIRE)   *The Pennsylvania State University*

NSF-FUNDED FELLOWSHIP TO CONDUCT FIELD RESEARCH IN COLOMBIA   *May 2022 - Jun 2022*

Adele Miccio Memorial Travel Award   *The Pennsylvania State University*

TRAVEL AWARD TO DISCUSS DISSERTATION AND CAREER PLANS WITH DR. EMILY MYERS (UCONN)   *Dec 2021*

University Graduate Fellowship   *The Pennsylvania State University*

FIVE-YEAR FELLOWSHIP FOR RESEARCH DOCTORAL STUDENTS   *Aug 2018 - present*

University Scholar Award   *The University of Chicago*

FOUR-YEAR MERIT SCHOLARSHIP   *Sep 2011 - Jun 2015*

Publications

Zaharchuk, H. A., & Karuza, E. A. (2021). Multilayer networks: An untapped tool for understanding bilingual neurocognition. *Brain and Language*, *220*, 104977.

Zaharchuk, H. A., Shevlin, A., & Van Hell, J. G. (2021). Are our brains more prescriptive than our mouths? Experience with dialectal variation in syntax differentially impacts ERPs and behavior. *Brain and Language*, *218*, 104949.

Lucero, C., **Zaharchuk, H.**, & Casasanto, D. (2014). Beat gestures facilitate speech production. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Meeting of the Cognitive Science Society*. Red Hook, NY: Curran Associates.

Presentations

Zaharchuk, H. A., & Van Hell, J. G. (2023, October). Investigating the roles of acoustic-phonetic and lexico-semantic processing in resolving perceptual ambiguity in spanish-accented english [Poster session]. 15th Annual Meeting of

the Society for the Neurobiology of Language (SNL), Marseille, France.

Zaharchuk, H. A., Lipski, J., & Van Hell, J. G. (2023, August). Mi casa es tu posá: Exploring the bilingual mental lexicon in speakers of spanish and palenquero [Poster session]. Architectures and Mechanisms for Language Processing Conference (AMLaP 29), Donostia-San Sebastián, Spain.

Zaharchuk, H. A., Medina, V., Paterno, S., Viswanathan, N., & Van Hell, J. G. (2023, March). Sentential context impacts bilingual speech-in-speech recognition [Poster session]. 36th Annual Conference on Human Sentence Processing (HSP), Pittsburgh, Pennsylvania.

Zaharchuk, H. A., Walker, A., & Van Hell, J. G. (2023, March). Tracking the time-course of cross-dialect comprehension with ERPs [Oral and poster sessions]. 30th Annual Meeting of the Cognitive Neuroscience Society (CNS), San Francisco, California.

Zaharchuk, H. A., Shevlin, A., & Van Hell, J. G. (2022, November). Experiencia con variación dialéctica en sintaxis afecta el procesamiento de lenguaje [Plenary session]. III Congreso Paraguayo de Lingüística Aplicada (CONPLA), Asunción, Paraguay.

Walker, A., **Zaharchuk, H. A.**, Fernandez, C. B., & Van Hell, J. G. (2021, August). The role of dialect expectation on lexical processing: EEG evidence [Oral session]. 5th Variation and Language Processing Conference (VALP5), Copenhagen, Denmark.

Zaharchuk, H. A., Shevlin, A., & Van Hell, J. G. (2020, May). We "might could" revisit syntactic processing: Studying dialectal variation with event-related potentials [Poster session]. 27th Annual Meeting of the Cognitive Neuroscience Society (CNS), Boston, Massachusetts.

Zaharchuk, H. A., Shevlin, A., & Van Hell, J. G. (2019, November). Auditory comprehension of double versus single modal constructions in Mainstream American English listeners [Poster session]. 60th Annual Meeting of the Psychonomic Society, Montréal, Québec, Canada.

Zaharchuk, H. A. (2015, June). Does linguistic experience change mental representations of pitch? [Poster session]. University of Chicago Undergraduate Research Symposium, Chicago, Illinois.

Invited talks

- Processing Variation (ProVAR) group led by Dr. Marije Soto, Federal University of Rio de Janeiro
- Psycholinguistic fieldwork guest lecture for Dr. Colleen Balukas, University at Buffalo (SUNY)

Research experience

Bilingualism and Language Development Lab   *University Park, Pennsylvania*

GRADUATE STUDENT   *Aug 2018 - present*

- Principal investigator: Dr. Janet G. van Hell
- Research areas: language processing and dialectal variation
- Responsibilities: design, implement, and run EEG and behavioral experiments with E-Prime; process and analyze experimental data with R and MATLAB; mentor undergraduate research assistants; maintain lab equipment and supplies

Experience and Cognition Lab   *Chicago, Illinois*

UNDERGRADUATE RESEARCH ASSISTANT   *Sep 2013 - Jun 2015*

- Principal investigator: Dr. Daniel Casasanto
- Research areas: embodied cognition and linguistic relativity
- Responsibilities: train, run, and debrief participants; code and analyze experimental data with ELAN and R; create new experiments with Python

Professional experience

Consumer Financial Protection Bureau   *Washington, District of Columbia*

FINANCIAL ANALYST   *Jul 2017 - Jul 2018*

- Collaborated with the Consumer Education and Engagement Division to write a spotlight report on language access for limited English proficient consumers as a member of the Language Access Task Force
- Researched debt collection and debt relief, particularly in the credit card and student loan markets, for the Consumer Lending, Reporting, and Collections Markets team

Consumer Financial Protection Bureau   *Washington, District of Columbia*

DIRECTOR'S FINANCIAL ANALYST   *Jul 2015 - Jul 2017*

- Supported the policy and research teams in the Office of Fair Lending and Equal Opportunity
- Performed business analytics, tracking, and reporting in the Supervision, Enforcement, and Fair Lending Front Office

Research Development Support (formerly Arete)   *Chicago, Illinois*

PROGRAM AND OPERATIONS ASSISTANT   *Feb 2013 - Jun 2015*

- Partnered with The University of Chicago research administration support faculty members pursuing complex research initiatives
- Provided program analysis, strategic planning, business metrics, and event support

Teaching experience

Psychology of language   *The Pennsylvania State University*

TEACHING ASSISTANT   *Jan 2021 - May 2021*

- Instructor: Dr. Katharine Donnelly Adams
- Seminar course covering auditory speech perception, visual word recognition, language representation, sentence comprehension and production, and language acquisition across the lifespan
- Presented guest lecture on linguistic variation and the relation between production and comprehension

Basic research methods in psychology   *The Pennsylvania State University*

TEACHING ASSISTANT   *Aug 2020 - Dec 2020*

- Instructor: Dr. Nicholas Pearson
- Introduction to experimental design, analysis, and presentation
- Led weekly laboratory section to reinforce lecture concepts

What makes us human?   *The Pennsylvania State University*

TEACHING ASSISTANT   *Jan 2020 - May 2020*

- Instructor: Dr. Daniel Weiss
- Senior seminar in comparative psychology

Neurological bases of human behavior   *The Pennsylvania State University*

TEACHING ASSISTANT   *Aug 2019 - Dec 2019*

- Instructor: Dr. Stephen Wilson
- Introduction to neuroscience theories and methods
- Presented guest lecture on auditory system and neuroanatomy of language production and comprehension

Outreach

Bilingualism and Language Development Lab   *University Park, Pennsylvania*

THE BRAIN BUS COORDINATOR   *Aug 2018 - present*

- Maintain *The Brain Bus*, BiLD's mobile neuroscience lab for field research and language science public engagement
- Participate in community outreach events, including as a volunteer judge at the Young Scholars of Western PA science fair

Center for Language Science   *University Park, Pennsylvania*

GRADUATE ASSISTANT   *Jan 2021 - May 2021*

- Created public repository for research on linguistic discrimination in collaboration with fellow graduate assistants
- Participated in ENVISION STEM career day for young women

Center for Language Science   *University Park, Pennsylvania*

GRADUATE ASSISTANT   *Aug 2019 - Dec 2019*

- Managed the Center's social media presence to engage the wider regional community in language science research
- Created and solicited content for the Winter/Spring 2020 Bilingualism Matters newsletter

Community service

Next Step Public Charter School   *Washington, District of Columbia*

MATHEMATICS TUTOR   *Jan 2017 - Jul 2018*

- Volunteered as a mathematics tutor with the bilingual GED and ESL program for immigrant and other at-risk youth
- Provided one-on-one assistance with practice problems and assignments once per week for 1-2 hours

Community Tax Aid *Washington, District of Columbia*

<small>VOLUNTEER TAX PREPARER</small> *Jan 2016 - Apr 2018*

- Volunteered as an IRS-certified advanced volunteer tax preparer with the Volunteer Income Tax Assistance (VITA) program, which offers free tax help to individuals who make $54,000 or less, individuals with disabilities, and limited English speaking individuals who need assistance in preparing their own tax returns
- Provided tax preparation services once per week for 3-4 hours during tax season

Academic service

- Ad hoc reviewing
    - *Brain and Language*
    - *Journal of Experimental Psychology: Learning, Memory, and Cognition*
    - *Scientific Reports*
- Workshops and tutorials
    - Leader: R Markdown for Graduate Students (2020), Creating HTML Reports with R Markdown (2020)
    - Assistant: R Bootcamp (2019) led by Dr. Rick Gilmore
- R Markdown for Psychology Graduate Students resource

Skills

- Natural languages: English, Spanish (B2/Intermediate)
- Programming languages: R, MATLAB, SQL, Python
- Software: E-Prime, Praat, Microsoft Suite, Adobe Suite
- Typesetting: R Markdown, LaTeX

Affiliations

- Center for Language Science
- Cognitive Neuroscience Society
- Psychonomic Society
- Society for the Neurobiology of Language
- Women in Cognitive Science