**HANNAH VALDIVIEJAS**

Curriculum Vitae

Department of Educational Psychology University of Illinois at Urbana-Champaign

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**EDUCATION**

2023, expected Ph.D., Cognitive Science of Teaching and Learning Division Concentration, Quantitative Research in Education Department of Educational Psychology

University of Illinois at Urbana-Champaign

2020 M.S., Educational Psychology

University of Illinois at Urbana-Champaign

2017 B.A., Psychology and Spanish

Northeastern Illinois University

**RESEARCH INTERESTS**

My research interests focus on the educational experiences of minoritized students in or considering majors/careers in STEM, with the goal of developing evaluation and pedagogy that enhance their academic outcomes. I am currently working on a project that focuses on acknowledging and identifying racialized/culturalized coping strategies that relate to self-regulated learning in the online STEM space, specifically at a predominantly White institutions. This work aims to informs current self-regulation models to be culturally responsive with the goal of centering asset-based approaches and promoting equitable teaching practices and assessment.

**GRANTS, FELLOWSHIPS, HONORS, AND AWARDS**

2021 Department of Educational Psychology Supplemental Block Grant Fellowship ($1,500)

2020 Department of Educational Psychology Supplemental Summer Block Grant (SSBG) Fellowship ($2,220)

2020-2021 Department of Educational Psychology Ray H. Simpson Scholarship, ($1,000)

2019-2020 Technology Innovation in Educational Research and Design (TIER-Ed) Graduate Research Award ($5,000)

2019 UIUC President's Research in Diversity Travel Assistance, ($500)

2018-2019 Department of Educational Psychology Block Grant Fellowship Award

($6,197)

2017 4.0 Cumulative GPA, Summa Cum Laude, Northeastern Illinois University

2017 APA PSI CHI Research Award ($500)

**PAPERS AND PRESENTATIONS** (\*Indicates peer-reviewed)

**\*Valdiviejas, H**., Williams-Dobosz, D., Xiong, C. & Bosch, N. (in preperation). Clustering

College Students’ Online Learning Behaviors Reveals Links to Metacognition and

Course Outcomes. *Learning Analytics and Knowledge (LAK 2022)*. 12th International Learning and

Analytics Conference.

**\*Valdiviejas, H**., Azevedo, R.F.L., Bosch, N., Anderson, C. J., & Perry, M. (2021, under

revision). Spontaneously Produced Metacognitive Language and Achievement in

Two STEM College Courses. *Journal of Metacognition and Learning.*

\* **Valdiviejas, H.**, Mistak, A., Koumoutsakis, T., Mogil, A., Ayman-Nolley, S.,

& Church, R. B. (2021, Under Review*).* The Role of Instruction with Gesture for Math

Learning in English Language Learners. *National Association of Bilingual Education (NABE)*

*Journal of Research and* *Practice*.

\*Mistak, A., Koumoutsakis, T., **Valdiviejas, H.**, Mogil, A., Ayman-Nolley, S.,

& Church, R. B. (2021, In preparation). *The role of children’s existing understanding and teachers’ gesture in math learning*.

**\*Valdiviejas, H**., & Bosch, N. (2020). Using association rule mining to uncover rarely

occurring relationships in two university online STEM courses: A comparative

analysis. *Proceedings of the 13th International Conference on Educational Data*

*Mining (EDM 2020)*. International Educational Data Mining Society**. [**[**PDF**](http://publish.illinois.edu/ilearngroup/files/2020/05/EDM2020_Valdiviejas_Bosch.pdf)**]**

\*Huang, E., **Valdiviejas, H**., & Bosch, N. (2019). I'm sure! Automatic detection of

metacognition in online course discussion forums. In *Proceedings of the 8th*

*International Conference on Affective Computing and Intelligent Interaction (ACII*

*2019)* (pp. 241–247). Piscataway, NJ:IEEE. https://doi.org/10.1109/ACII.2019.8925506

[PDF]

\***Valdiviejas** Cohn, H. (2015). From the Frying Pan into the Fire: Ernest Hemingway’s

“Soldier’s Home” and Phil Klay’s “Redeployment”. *The Harper Anthology Volume*

*XXVII 2015* (pp. 129-135). William Rainey Harper College. [PDF](http://dept.harpercollege.edu/english/documents/Anthology2015.pdf)

**PRESENTATIONS**

Williams-Dobosz, D., **Valdiviejas, H**., McCall, G., & Seals, C. (2021, August). *Does*

*Performance Orientation Play a Unique Role for BIPOC learners?* Poster accepted

to American Psychological Association Convention, San Diego, California

**Valdiviejas, H**. (2021, October*). Language-as-a-Resource and Mathematics through the*

*Constructivist Perspective*. Paper accepted to Culturally Responsive Evaluation and Assessment (CREA) 6th International Conference, Chicago, Illinois.

**Valdiviejas, H**., &Seals, C. (2021, May). *A Large-Body Text Analysis of Student Response Data as an*

*Indication of Psychosocial Intervention Effectiveness*. Paper accepted at the Association

of Psychological Sciences (APS) Convention, Virtual (COVID-19).

**Valdiviejas, H**., Maldonado, E., Leitao Ferreria., R., Bosch, N., Anderson, C., & Perry, M.

(2021, April). *Spontaneously produced metacognitive language and achievement in*

*a STEM online college course: An exploratory analysis*. Roundtable Session

accepted to American Educational Research Association Annual Meeting, Virtual

(COVID-19)

**Valdiviejas, H**., Koumoutsakis, T., Mistak, A., Mogil, Ayman-Nolley, S., Ayman-Nolley, S., & Church, R.B. Church, R.B. (2021, April). *Does gesture play the same role if it accompanies English or Spanish  instruction for ELL Math Learning?* Roundtable Session accepted American Educational Research Association Annual Meeting, Virtual (COVID-19)

**Valdiviejas, H**., Koumoutsakis, T., Mistak, A., Mogil, Ayman-Nolley, S., Ayman-Nolley, S., & Church, R.B. Church, R.B. (2021, April). *The role of instruction with gesture for english language learners’ math learning*. Poster accepted to Society for Research on Child Development (SRCD), Virtual (COVID-19)

Seals, C., & **Valdiviejas, H**. (2021, April). *A Teacher-Based Growth Mindset Intervention’s*

*Impact on Minoritized Student Motivation in Mathematics*. Paper accepted to AERA

Annual Meeting, Virtual (COVID-19)

Williams-Dobosz, D., **Valdiviejas, H**., & Seals, C. (2021, March). *A racialized lens to*

*achievement goal theory: Past, present, and future directions*. Paper

presented at 12th Annual College of Education Graduate Student Conference,

Urbana-Champaign, Illinois

**Valdiviejas, H.** (2020, March). *Spontaneously Produced Metacognitive Language and*

*Achievement in two University-Level STEM Courses: An Exploratory Analysis.* Talk

given at the 2020 GraduateStudent Conference, Champaign, Illinois.

*Hindsight 2020: Bridging the gap.* (2020, January). Panelist, NEIU alumni Association and

NEIU Psychology Department, Northeastern Illinois University, Chicago.

Mistak A., Koumoutsakis T., **Valdiviejas Cohn H**., Khan A., Ayman-Nolley S., Singer M.,

& Church R. B. (October, 2019). *Strategies matter: Pre-instruction knowledge*

*moderates* *the effect of instruction with gesture on math learning*. Poster presented as part of the 2019 Biennial Cognitive Development Society (CDS) Conference, Louisville, KY.

**Valdiviejas, H.,** Bosch, N., Huang E. Y., Jay T., Anderson, C**.**, & Perry, M. (October, 2019).

*Expression of Metacognition in Online STEM Courses: Functions and Effects* Poster

presented at the 2019 Cognitive Development Society, Louisville, Kentucky.

**\*Valdiviejas, H.**, Morales, D., Koumoutsakis, T., Khan, A., Standley, M., Mistak, A.,

Ayman-Nolley, S., & Church, R. B. (May, 2018). *Not a one-size- fits-all: Gesture’s*

*questionable role in English-Language-Learning students’ mathematical equivalence*

*understanding*. Paper presented at the 48th Annual Meeting of the Jean Piaget

Society, Amsterdam, Netherlands.

**Valdiviejas, H.**, Koumoutsakis, T., Khan, A., Mistak, A., Ayman-Nolley, S. & Church, R. B. (April, 2018). *TMI: Is instruction with gesture too much input for ESL students?* Poster presented at the Midwestern Psychological Association Conference, Chicago, Illinois.

Khan, A., Koumoutsakis, T., **Valdiviejas, H.**, Mistak, A., Ayman-Nolley, S. & Church, R. B. (April, 2018). *This is a man’s world: Students learn more easily from a male math instructor.* Poster presented at the 2018 Midwestern Psychologic Association Conference, Chicago, Illinois.

Koumoutsakis, T., Mistak, A., Pineda, L. Y., Khan A., **Valdiviejas, H.**, Ayman-Nolley, S.,

& Church, R. B. (October, 2017). *The role of gesture in math learning: Do boys*

*benefit more than girls?* Poster presented at the 2017 Cognitive Development

Society, Portland, Oregon.

Koumoutsakis, T., Mistak, A., Pineda, L., Khan, A., **Valdiviejas, H.**, Ayman-Nolley, S., & Church, R. B. (October, 2017). *The role of gesture in math learning: Do boys benefit* *more than girls?* Poster presented at the Biennial Meeting of the Cognitive Development Society, Portland, Oregon.

**Valdiviejas, H.**, Alonzo, Y., Khan, A., Koumoutsakis, T., Mistak, A., Ayman-Nolley, S., & Church, R. B. (October, 2017). *Can gesture help students in bilingual classrooms learn* *math?* Poster presented at the Biennial Meeting of the Cognitive Development Society, Portland, Oregon

Alonzo, Y., Khan, A., **Valdiviejas, H.**, Koumoutsakis, T., Mistak, A., & Church, R. B. (October, 2017). *Too much input for bilingual students?: Gesture and math learning*. Poster presented as part of the 2017 SACNAS The National Diversity in STEM Conference, Salt Lake City, Utah.

\*Mistak, A., Koumoutsakis, T., Khan, A., Pineda, L., **Valdiviejas, H.**, Ayman-Nolley, S., &

Church, R. B. (June, 2017). *Gestured instruction and children’s misconceptions of mathematical equivalence*. Paper presented at the 47th Annual Meeting of the Jean Piaget Society, San Francisco, California.

\*Koumoutsakis, T., Mistak, A., Pineda, L., Khan, A., **Valdiviejas, H.**, Ayman-Nolley, S. & Church, R. B. (November, 2017). *Is the success of gestured instruction affected by students’ preexisting incorrect math strategies?* Poster presented at the NCTM 2017 Regional Conference & Exposition, Chicago, Illinois.

\*Pineda, L., **Valdiviejas, H.**, Mistak, A., Khan, A., Koumoutsakis, T., Ayman-Nolley, S.,

Church, R. B. (June, 2017). *The role of gesture in teaching bilingual students mathematical equivalence*. Poster presented at the 47th Annual Meeting of the Jean Piaget Society, San Francisco, California.

Morales, D., Alonzo, Y., Arenas, M., Khan, A., Koumoutsakis, T., **Valdiviejas, H.**, Ayman-Nolley, S., & Church, R. B. (February, 2017). *Gestures and education: Helping English language learners grasp abstract math concepts through the use of hand gestures*. Poster presented at the Regional Louis Stokes Alliance for Minority Participation (LSAMP) Symposium & Student Research Conference, Lisle, Illinois.

Alonzo, Y., Khan, A., **Valdiviejas, H.**, Koumoutsakis, T., Mistak, A., & Church, R. B. (September, 2017). *Too much input for bilingual students? Gesture and math learning.* Poster presented as part of the 9th Annual SCSE Student Research Symposium, Northeastern Illinois University, Chicago, Illinois.

**Valdiviejas, H.**, Khan, A., Koumoutsakis, T., Mistak, A., & Church, R. B. (September,

2017). *Closing the gender gap in math achievement: The role gesture plays in math education for girls*. Presented at the Women in Science Conference, Northeastern Illinois University, Chicago, Illinois.

**Valdiviejas, H.**, Ramos, H., Espinosa, Ayman-Nolley, S., & Church, R. B. (April, 2017).

*Role of gesture in learning between monolingual and bilingual students.* Presented as part of the 24th Annual Student Symposium, Northeastern Illinois University, Chicago, Illinois.

**Valdiviejas, H.**, Turner, S., Redemalla, S., Hweih, L., Ayman-Nolley, S., & Church, R. B. (December, 2016). *Role of gesture in bilingual student math comprehension*. Presented at the 12th Annual Psychology Department Fall Student Symposium, Northeastern Illinois University, Chicago, Illinois.

**RESEARCH EXPERIENCE**

2020-present Deans Fellow Research Assistant, R., Hopson, Principal Investigator, University of Illinois at Urbana-Champaign

2019-2020 Research Assistant, *Curriculum Assessment & Veterinary Education,* C. Seals, Principal Investigator*,* University of Illinois at Urbana-Champaign,

2019-present Lab Member, (Human + Machine) Learning Lab, N., Bosch, Principal Investigator, University of Illinois at Urbana-Champaign [HPML Website](https://humanplusml.com/index.html)

2018-present Research Assistant, *Underrepresented Student Learning in Online Introductory STEM College Courses* (IES R305A180211, M. Perry, Principal Investigator, University of Illinois at Urbana-Champaign [iLearn Website](https://publish.illinois.edu/ilearngroup/)

2017-2018 Preschool Teacher for 2-year-old children and for Spanish instruction, The Gardner School, Northbrook, IL

2016-2017 Laboratory Assistant, *The role of gesture in mathematics learning: From* *research to practice* (R. B. Church, director), Northeastern Illinois University

2016-2017 Teaching Assistant, *Statistics and Research Methods in Psychology* (Y.Polyashuk, Professor), Northeastern Illinois University

**SERVICE**

2020-2021 Graduate Student Representative, Equity and Social Justice Subcommittee, Office of the Dean, College of Education, University of Illinois at Urbana-Champaign

2020-2021 Graduate Student Representative, Student Organization Resource Fee Board, Student Affairs, University of Illinois at Urbana-Champaign

2020-Present Vice President, Student Opportunities for After School Resources (Registered Student Organization), College of Education, University of Illinois at Urbana-Champaign

2019-2020 Doctoral Student Representative, College Grievance Committee,

College of Education, University of Illinois at Urbana-Champaign

2019-2020 Assistant Coordinator, Student Opportunities for After-School Resources, Center for Education in Small Urban Communities, College of Education, University of Illinois at Urbana-Champaign

2019-Present Editor and webmaster for iLearn research group’s website

2018-Present Member, Technology Innovation in Educational Research and Design committee

2018-2019 Graduate Student Conference Reviewing Committee and Organizer, College of Education, University of Illinois at Urbana-Champaign

2018-Present Bilingual Tutor, Student Opportunities for After-School Resources, Center for Education in Small Urban Communities, College of Education,

University of Illinois at Urbana-Champaign

**UNDERGRADUATE STUDENTS MENTORED**

* Eugenia Maldonado, 2020-2021, Systems Engineering & Design UIUC
* Sulaiman Sanaullah, 2019-2020, Anthropology UIUC

**PROFESSIONAL AFFILIATIONS**

• American Psychological Association

* American Psychological Society

• Cognitive Development Society

• Jean Piaget Society

* Society for Research and Child Development
* American Educational Research Association

**RELEVENT SKILLS**

• Speak, write, and understand Spanish fluently

• UIUC CITI (Collaborative Institutional Training Initiative) certified

• Proficient in EXCEL, SPSS, Python, RapidMiner, WEKA, Taguette, MAXQDA, and R statistical analysis software packages

**REFERENCES**

Michelle Perry, Ph.D.

Department of Educational Psychology and Beckman Institute for Advanced Science and

Technology

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Champaign, IL 61820 [mperry@illinois.edu](mailto:mperry@illinois.edu)

Nigel Bosch, Ph.D.

School of Information Sciences, Department of Educational Psychology, and National Center for

Supercomputing Applications

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