Andrea Díaz-Barriga Yáñez

Contact Information

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https://andrea-diaz.github.io/

References available on request

EDUCATION

Ph.D. in Psychology / 2014-2018
The University of Sheffield, Sheffield, UK
Thesis Title: Domain-general precursors of children's mathematics skills: The role of working memory and language.

MSc Psychology / 2012-2014
Autonomous University of San Luis Potosi, San Luis Potosi, Mexico
Thesis (approved with honours): Neuropsychological intervention program in a paediatric sample with HIV: The roles of attention, memory, language, and executive functions.
GPA: 9.84/10

Bachelor in Psychology / 2006-2011
Autonomous University of San Luis Potosi, San Luis Potosi, Mexico
Thesis (approved with honours): Relationship between low and high academic performance and executive functions in two high schools in the city of San Luis Potosi.
GPA: 9.4/10

PUBLICATIONS

Díaz-Barriga Yáñez, A., Longo, L., Chesnokova, H., Poletti, C., Thevenot, C., & Prado, J. (2023). Neural evidence for procedural automatization during cognitive development: Intraparietal response to changes in very-small addition problem-size increases with age. Developmental Cognitive Neuroscience, 64. https://doi.org/10.1016/j.dcn.2023.101310

Poletti, C., **Díaz-Barriga Yáñez, A.**, Prado, J., & Thevenot, C. (2023). The development of simple addition problem solving in children : Reliance on automatized counting or memory retrieval depends on both expertise and problem size. Journal of Experimental Child Psychology, 234. https://doi.org/10.1016/j.jecp.2023.105710

Díaz-Barriga Yáñez, A., Couderc, A., Longo, L., Merchie, A., Chesnokova, H., Langlois, E., Thevenot, C., & Prado, J. (2020). Learning to run the number line: the development of attentional shifts during single-digit arithmetic. Ann. N.Y. Acad. Sci., 1477: 79-90. https://doi.org/10.1111/nyas.14464

Díaz-Barriga, A., & Navarro, M.E. (2014). Características neuropsicológicas de una población pediátrica con VIH. Revista Neuropsicología, Neuropsiquiatría y Neurociencias, 14(3), 1-17. http://revistaneurociencias.com/index.php/RNNN/article/view/35/24

Book chapter
Diaz-Barriga, A. (2017). Capítulo 23. Aspectos neuropsicológicos y neurológicos asociados a la infección por VIH/SIDA pediátrico. In Neuropsicología Clínica Hospitalaria (pp. 425-427). México: Asociación Mexicana de Neuropsicología, A.C

EMPLOYMENT HISTORY

Postdoctoral Fellow / 2021-2023
Laboratory for the Study of Cognitive Mechanisms (Laboratoire d'Etudes des Mécanismes Cognitifs), Bron, France

Postdoctoral Fellow / 2019-2021
Lyon Neuroscience Research Centre (Centre de Recherche en Neuroscience de Lyon), Bron, France

Lecturer (Temporary) / January-June 2019
Autonomous University of San Luis Potosi, Faculty of Psychology, San Luis Potosi, Mexico

Cognitive Psychologist / January-June 2019
Neuropsychology Attention Center (Centro de Atencion de Neuropsicologia, CEAN), San Luis Potosi, Mexico

Cognitive Psychologist / 2013-2014
CANTA and TGD Centre (Centro de Atención a Niños con Trastornos de Aprendizaje y Tratarnos Generalizados del Desarrollo, 'CANTA y TGD'), San Luis Potosi, Mexico

Cognitive psychologist / 2012-2014
Paediatric HIV Clinic at the 'Soledad de Graciano Sanchez' Hospital (Clínica Pediátrica de VIH- Hospital General de Soledad de Graciano Sánchez), San Luis Potosi, Mexico

RESEARCH EXPERIENCE

Research project/ Ongoing
Laboratory for the Study of Cognitive Mechanisms (Laboratoire d'Etudes des Mécanismes Cognitifs), Bron, France
"Exploring the neural correlates of attentional refreshing"
Dr Gaën Plancher (PI)

Research project/ Ongoing
Laboratory for the Study of Cognitive Mechanisms (Laboratoire d'Etudes des Mécanismes Cognitifs), Bron, France
"Can distractors under the threshold of consciousness lead to forgetting in working memory?"
Dr Gaën Plancher (PI)

Research project / 2019-2021
Lyon Neuroscience Research Centre (Centre de Recherche en Neuroscience de Lyon), Bron, France
"Neurodevelopment of arithmetic skills."
Dr Jérôme Prado (PI) and Dr Catherine Thevenot (PI)

Research project / 2020
Lyon Neuroscience Research Centre (Centre de Recherche en Neuroscience de Lyon), Bron, France
"Learning to run the number line: the development of attentional shifts during single digit arithmetic"
Dr Jérôme Prado (PI)

Research project (external collaboration) / 2019
Autonomous University of San Luis Potosi, Faculty of Medicine, Gender, Health, and Environment Lab. San Luis Potosi, Mexico
"Evaluation of the magnitude of exposure to PBDEs, PCBs and lead on Mexican families' health working with electrical waste and electronic equipment. Pilot study"
Dr Leticia Yanez Estrada (PI)

Research project / 2014- 2018
The University of Sheffield, Psychology Department, Sheffield, UK
"Domain-general precursors of children's mathematics skills: The role of working memory and language"
Supervised by Dr Daniel Carroll and Dr Danielle Matthews

Research project (Supervision) / Summer 2017
The University of Sheffield, Psychology Department, Sheffield, UK
"Deconstructing mathematics word problem-solving: Contributions of cognition and language"
Co-supervised by Dr Emma Blakey

Research project / 2012-2014
Autonomous University of San Luis Potosi, Faculty of Psychology, San Luis Potosi, Mexico
"Neuropsychological intervention program in a paediatric sample with HIV: The roles of attention, memory, language, and executive functions"
Supervised by Dr Maria Elena Navarro and Dr Omar Sanchez-Armass.

SELECT PRESENTATIONS

Talk / August 2023
23rd Conference of the European Society for Cognitive Psychology (ESCOP), Porto, Portugal
"Forgetting in working memory: Does interference's level of attention matters?"

Talk / August 2022
22st Conference of the European Society for Cognitive Psychology (ESCOP), Lille, France
"Can distractors under the threshold of consciousness lead to forgetting in working memory?"

Talk / June 2022
Mathematical Cognition and Learning Society (MCLS) Conference 2022, Anvers, Belgium
"Computational and neural bases of arithmetic procedures" in "From counting to arithmetic fluency" symposium.

Poster (virtual) / April 2021
Society for Research in Child Development (SRCD) 2021 Virtual Biennial Meeting
"The emergence of attentional shifts during single-digit calculation in 8 to 11-year-old children".

Talk / March 2021
La Semaine Du Cerveau, Lyon, France
"Comment Notre Cerveau Apprend-il à Faire des Maths ? "

Talk / August 2019
18th Biennial EARLI Conference for Research on Learning and Instruction. Aachen, Germany
"The role of language and working memory in children's mathematics skills" in "The importance of linguistic and cognitive information-processing skills for mathematical learning" symposium.

PROFESSIONAL MEMBERSHIP

- Society for Research in Child Development: Latinx Caucus Member (Since 2016)
- Mathematical Cognition and Learning Society (Since 2017)
- European Society for Cognitive Psychology (Since 2022)
- Psychonomic Society (Since May 2023)

OTHER SKILLS AND ACTIVITIES

- **Peer-reviews:** Journal of Cognitive Psychology (2022), Journal of Numerical Cognition (2022), Infant and Child Development (2021, member of the Editorial Board since January 2023), and Quarterly Journal of Experimental Psychology (2020).
- **Statistical software :** JAMOVI, JASP, SPSS, MATLAB, RStudio .
- **Other software:** Brainstorm, MS-Office suite, Psychopy, OpenSesame, DMDX, E-prime, Canva.
- **Neuropsychology** : Cognitive assessment.
- **Languages:** Spanish (first language), English (fluent), French (intermediate).