**CURRENT CV**

**Macarena Suárez Pellicioni, PhD**

January 2023

**CONTACT**

Department of Educational Studies in Psychology, Research Methodology, and Counseling, University of Alabama, Alabama, USA. 270 Kilgore Ln, Tuscaloosa, Alabama (35401).

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University of Alabama profile: <https://mspellicioni.people.ua.edu/>

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Google Scholar: <https://scholar.google.com/citations?user=fdmg8PMAAAAJ&hl=es&oi=sra>

ResearchGate: [https://www.researchgate.net/profile/Macarena\_Suárez\_Pellicioni](https://www.researchgate.net/profile/Macarena_Suarez_Pellicioni)

**POSITIONS**

Department of Educational Studies in Psychology, January 2020 - Present

Research Methodology, and Counseling.

The University of Alabama, USA

Assistant Professor

Brain Development Lab

Department of Psychology and Human Development August 2017 - October 2019

Vanderbilt University, USA

Post-doctoral research associate

PI/Supervisor: Dr. James R. Booth

Brain Development Lab

Department of Communication Sciences and Disorders November 2015 - August 2017

The University of Texas at Austin, USA

Post-doctoral research associate

PI/Supervisor: Dr. James R. Booth

Faculty of Psychology, University of Barcelona, Spain September 2014 - March 2015

Research Assistant

PI/Supervisor: Dr. María Isabel Núñez Peña

Human Performance Lab

Department of Psychology, University of Chicago, USA February 2014 - May 2014

Visiting Scholar

PI/Supervisor: Dr. Sian Beilock

Faculty of Psychology, University of Barcelona, Spain September 2010 - August 2014

Pre-doctoral Student

PI/Supervisor: Dr. María Isabel Núñez Peña

**EDUCATION**

Faculty of Psychology, University of Barcelona, Spain 2010-2014

Ph.D. in Psychology

Title of the thesis: “*Abnormal numerical processing in math-anxious individuals: Evidence from event-related potentials*”

Faculty of Psychology, University of Barcelona, Spain 2010-2011

Master in Cognitive Science and Language

Faculty of Psychology, University of Barcelona, Spain 2004-2008

Bachelor's Degree in Psychology

**PEER-REVIEWED PUBLICATIONS**

**UNDER REVISION**

24. **Suárez Pellicioni**, M., Demir-Lira, E., & Booth, J.R. (2023). Positive math attitudes are associated with greater frontal cortex activation to solve large multiplication problems among children from higher socio-economic status families.

**ACCEPTED FOR PUBLICATION**

23. **Suárez Pellicioni, M.,** Prado, J., & Booth, J.R. (2022). Neurocognitive mechanisms underlying multiplication and subtraction performance in adults and skill development in children: a scoping review. *Current Opinion in Behavioral Sciences,* 48, 101228.

22. **Suárez Pellicioni, M.** & Booth, J.R. (2022). Temporal cortex activation explains children’s improvement in math attitudes. *Child Development, 93, 4,* 1–18.

21. **Suárez Pellicioni, M.,** Soylu, F., & Booth, J. (2021). Gray matter volume in intraparietal sulcus predicts longitudinal gains in subtraction skill in elementary school. *NeuroImage*, 235, 118021.

20. **Suárez Pellicioni, M.**, Demir-Lira, Ö.E., & Booth, J.R. (2021). Neurocognitive mechanisms explaining the role of math attitudes in predicting children’s improvement in multiplication skill. *Cognitive, Affective, and Behavioral Neuroscience,* DOI: 10.3758/s13415-021-00906-9.

19. **Suárez Pellicioni, M.**, Berteletti, I., & Booth, J.R. (2020). Early engagement of parietal cortex for subtraction solving predicts longitudinal gains in behavioral fluency in children. *Frontiers in Human Neuroscience,* 14, 163.

18. Demir-Lira, Ö.E., **Suárez Pellicioni, M.,** Binzak, J.V. & Booth, J.R. (2020). Attitudes Toward Math are Differentially Related to the Neural Basis of Multiplication Depending on Math Skill. *Learning Disability Quarterly,* 43(3), 1-13.

17. **Suárez Pellicioni, M.**, Fuchs, L., & Booth, J.R. (2019). Tempo-frontal cortex activation during phonological processing predicts gains in arithmetic facts in young children. *Developmental Cognitive Neuroscience, 40, 100735.*

16. **Suárez Pellicioni, M.**, Lytle, M., Younger, J., & Booth, J.R. (2019). A longitudinal neuroimaging dataset on arithmetic processing in 8- to 16-year old children. *Scientific Data, 201*9; 6: 190040.

15. **Suárez Pellicioni, M**., Prado, J. & Booth, J.R. (2018). Lack of improvement in multiplication is associated with reverting from verbal retrieval to numerical operations. *NeuroImage*, 183, 859-871.

14. **Suárez Pellicioni, M.** & Booth, J.R. (2018). Fluency in symbolic arithmetic refines the approximate number system in parietal cortex***.*** *Human Brain Mapping,* 39: 3956-3971.

13. Núñez-Peña, M.I., Tubau, E. & **Suárez Pellicioni, M.** (2017). Post-error response inhibition in high math-anxious individuals: Evidence from a multi-digit addition task. *Acta Psychologica,* 177, 17-22.

12. Núñez-Peña, M.I. & **Suárez Pellicioni, M.** (2015). Processing of multi-digit additions in high math-anxious individuals: Psychophysiological evidence. *Frontiers in Psychology,* 6 (1268).

11. **Suárez Pellicioni, M.,** Núñez-Peña, M.I. & Colomé, A. (2015). Math anxiety: A review of its cognitive consequences, psychophysiological correlates, and brain bases. *Cognitive, Affective and Behavioral Neuroscience,* 16(1), 3-22.

10. **Suárez Pellicioni, M.,** Núñez-Peña, M.I. & Colomé, A. (2015). Attentional bias in high math-anxious individuals: Evidence from an emotional Stroop task. *Frontiers in Psychology,* 6 (1577).

9. Núñez-Peña, M.I., Bono, R. & **Suárez Pellicioni, M.** (2015).Feedback on students’ performance: A possible way of reducing the negative effect of math anxiety in higher education. *International Journal of Educational Research,* 70, 80-87.

8. Núñez-Peña, M.I. & **Suárez Pellicioni, M.** (2014). Less precise representation of numerical magnitude in high math-anxious individuals: An ERP study of the size and distance effects.*Biological Psychology,* 103, 176-183.

7. **Suárez Pellicioni, M.,** Núñez-Peña, M.I. & Colomé, A. (2014). Reactive recruitment of attentional control in math anxiety: an ERP study of the numeric conflict monitoring and adaptation.*PLoS ONE,* 9(6): e99579.

6. **Suárez Pellicioni, M.,** Núñez-Peña, M.I. & Colomé, A. (2013). Abnormal error monitoring in math-anxious individuals: evidence from error-related brain potentials. *PLoS ONE,* 8(11), e81143.

5. **Suárez Pellicioni, M.,** Núñez-Peña, M.I. & Colomé, A. (2013). Mathematical anxiety effects on simple arithmetic processing efficiency: An Event-related potential study. *Biological Psychology,* 94, 517-526.

4. Núñez-Peña, M.I., Guilera, G. & **Suárez Pellicioni, M.** (2013). The Single-Item Math Anxiety scale (SIMA): An alternative way of measuring mathematical anxiety. *Journal of Psychoeducational Assessment,* 32(4), 306-317.

3. Núñez-Peña, M.I., **Suárez Pellicioni, M**. & Bono, R. (2013). Effects of math anxiety on student success in higher education. *International Journal of Educational Research,* 58, 36-43.

2. Núñez-Peña, M.I., **Suárez Pellicioni, M**., Guilera, G. & Mercadé-Carranza, C. (2013). A Spanish version of the short Mathematics Anxiety Rating Scale (sMARS).*Learning and Individual Differences,*24,204-206*.*

1. Núñez-Peña, M.I. & **Suárez Pellicioni, M.** (2012). Processing false solutions in additions: differences between high- and lower-skilled arithmetic problem-solvers. *Experimental Brain Research,* 218(4), 655-663.

**OTHER PUBLICATIONS: PRE-REGISTRATIONS**

**Cerda, V., Suárez Pellicioni, M., Booth, J. & Wicha, N.** (February 15th, 2023).Localizing Arithmetic in the Adult Bilingual Brain. <https://osf.io/vbtr3>

**Suárez Pellicioni, M.,** Demir-Lira, Ö.E., Lytle, M. & Booth, J.R. (July 3rd, 2019) Neurocognitive mechanisms of the role of math attitudes in predicting gains in subtraction skill in children. <https://osf.io/d5rc9/?view_only=>

**PRESS RELEASES**

**Suárez Pellicioni, M.** & Booth. J.R. (2019). Researcher shares largest neuroimaging dataset on math development. <https://news.vanderbilt.edu/2019/03/05/researcher-shares-largest-neuroimaging-dataset-on-math-development/>

**Suárez Pellicioni, M.** & Booth. J.R. (2018). Scientists discover the power of math education in modeling the primal brain. <https://news.vanderbilt.edu/2018/07/23/babies-instinctive-counting-skills-may-not-predict-future-math-smarts/>

**Suárez Pellicioni, M.** & Booth. J.R. (2018). Scientists discover the power of math education in modeling the primal brain. *Research News @ Vanderbilt*. *Neuroscience News*. *Anygator*. *MedicalXPress*. <https://neurosciencenews.com/arithmetic-quanity-primal-brain-9605/>

**Suárez Pellicioni, M.,** Núñez-Peña, M.I. & Colomé, A. (2014). Numeric errors: How they affect people with high math anxiety? (English translation from Spanish). *Ciencia Cognitiva,* 8(2), 28-31. <http://www.cienciacognitiva.org/?p=872>

**OTHER PUBLICATIONS: PUBLISHED CONFERENCE ABSTRACTS**

Núñez-Peña, M.I., Bono, R. & **Suárez Pellicioni, M**. (2015). Feedback in teaching: A factor associated with the reduction of the negative effect of math anxiety. (English translation from Spanish). *Revista de la Fundación Educación Médica,* 18(S1), S42-S43.

Núñez-Peña, M.I**.** & **Suárez Pellicioni, M.** (2014). Differences in the representation of numerical magnitude related to math anxiety: Psychophysiological evidence. (English translation from Spanish). *Psicológica,* 35, Special report, 1-238.

**Suárez Pellicioni, M.,** Núñez-Peña, M.I**.** & Colomé, A. (2014). Attentional bias in high math-anxious individuals: A study with the emotional Stroop task. (English translation from Spanish). *Psicológica,* 35, Special report, 1-238.

**Suárez Pellicioni, M.,** Núñez-Peña, M.I**.** & Colomé, A. (2014). Numeric conflict monitoring and adaptation in high math-anxious individuals: An event-related potential study*.* (English translation from Spanish). *Psicológica,* 35, Special report, 1-238.

Bono, R., Núñez-Peña, M.I., **Suárez Pellicioni, M.** & Arnau, J. (2013). Evaluation of academic performance in Research Designs course. (English translation from Spanish). *Revista de la Fundación Educativa Médica,* 16, Supplement 1.

**Suárez Pellicioni, M.,** Núñez-Peña, M.I**.** & Colomé, A. (2013). Abnormal error monitoring in math anxious individuals: Evidence from error-related brain potentials. *Psychophysiology,* 50, Supplement 1, S1-S150.

**Suárez Pellicioni, M.,** Núñez-Peña, M.I**.** & Colomé, A. (2013). Individual differences in error monitoring in high math-anxious individuals. *Personality and Individual Differences,* 60, S59.

Núñez-Peña, M.I., Guilera, G. & **Suárez Pellicioni, M**. (2013). The Single-Item Math Anxiety scale (SIMA): An alternative way of measuring mathematical anxiety. *Personality and Individual Differences,* 60, S59.

Núñez-Peña, M.I**.** & **Suárez Pellicioni, M.** (2012). The Effect of arithmetic proficiency on solving subtractions: ERP evidence. *International Journal of Psychophysiology,* 85(3), 279-430.

**Suárez Pellicioni, M.** & Núñez-Peña, M.I. (2011). Differences between high- and lower-skilled arithmetic problem solvers when solving incongruities in additions. *Frontiers in Human Neuroscience*. Conference Abstract: XI International Conference on Cognitive Neuroscience (ICON XI).

Núñez-Peña, M.I**.**, **Suárez Pellicioni, M.,** Gracia-Bafalluy, M. & Tubau, E. (2011). Individual differences in the arithmetic ability reflected in event-related potentials*.* (English translation from Spanish). *Revista de Neurología,* 52(5), 306-315.

**Suárez Pellicioni, M.** & Núñez-Peña, M.I. (2011). Split effect in arithmetic: Individual differences in the ERPs pattern*.* (English translation from Spanish). *Revista de Neurología,* 52(5), 306-315.

**OUTREACH**

Bridges’s 11th Annual Wellfest for deaf, hard of hearing, deaf-blind, and hearing. April 6th, 2019, Nashville, Tennessee.

Brain Blast. March 16th, 2019. Nashville, Tennessee.

Bridges’s 10th Annual Wellfest for deaf, hard of hearing, deaf-blind, and hearing. April 7th, 2018, Nashville, Tennessee.

Brain Blast. March 17th, 2018. Nashville, Tennessee.

Suárez Pellicioni, M., Núñez-Peña, M.I. & Colomé, A. (2013). “Psychophysiological correlates of math anxiety” (English translation from Spanish). One-hour talk for the “University of Experience” class, comprising elderly students (more than 65 years old). April 2013, University of Barcelona.

**TALKS**

The University of Alabama, Brain Awareness Week, *Neurocognitive mechanisms explaining the role of math attitudes in predicting children’s math skill* (March 14th, 2022).

The University of Alabama at Birmingham, Comprehensive Neuroscience Center, Neuroscience Café. *Can brain science help us understand how we should learn math?* (November 18th, 2021).

The University of Alabama, Department of Psychology, Cognitive Contemporary Issues, *Neurocognitive correlates associated with improvement in math skill over time* (October 22nd, 2021).

University of Massachusetts at Amherst, Department of Psychological and Brain Sciences. *Neurocognitive correlates associated with longitudinal gains in arithmetic fluency* (November 5th, 2020).

The University of Alabama, UAB/UA/Auburn Neuroimaging Consortium. *Neurocognitive correlates associated with longitudinal gains in arithmetic fluency* (October 30th, 2020).

The University of Alabama, Readings in Educational Psychology, *Neurocognitive correlates associated with longitudinal gains in arithmetic fluency* (October 16th, 2020).

The University of Alabama, Department of Educational Studies in Psychology, Research Methodology, and Counseling. *Neurocognitive mechanisms supporting successful math performance and math improvement in children* (February 27th, 2019).

Arizona State University, Department of Psychology. *Neurocognitive mechanisms supporting successful math performance and math improvement in children* (March 13th, 2019).

**CONFERENCE PRESENTATIONS**

**Suárez Pellicioni, M.,** Demir-Lira, E. & Booth, J.R. (2022). Neurocognitive mechanisms explaining math attitudes’ role in predicting children’s multiplication improvement. Talk presented (via video) as part of the symposium entitled “*Brain correlates of mathematics: the role of language modality, expertise, and affective factors*”. 4th Math Cognition and Learning Society conference. Antwerp, Belgium.

**Suárez Pellicioni, M.,** Berteletti, I. & Booth, J.R. (2020). Early engagement of quantity mechanisms predicts gains in subtraction fluency in children. Abstract accepted for the 3rd Math Cognition and Learning Society conference. Dublin, Ireland. (Conference was canceled due to COVID-19).

Soylu, F.& **Suárez Pellicioni, M.** (2020). Gray matter correlates of mathematical fluency in children. Abstract accepted for the 3rd Math Cognition and Learning Society conference. Dublin, Ireland. (Conference was canceled due to COVID-19).

**Suárez Pellicioni, M.,** Berteletti, I. & Booth, J.R. (2019). Neurocognitive Mechanisms Supporting Successful Math Performance and Math Improvement in Children. Talk given at the 8th Annual Alabama Advanced Imaging Consortium. Delta, Alabama, USA.

**Suárez Pellicioni, M.,** Prado, J. & Booth, J.R. (2019). Lower math gains are associated with lack automaticity of multiplication facts in long-term memory. Paper symposium presented at the 2019’s meeting of the Society for Research in Child Development. Baltimore, Maryland, USA.

**Suárez Pellicioni, M.** & Booth, J.R. (2018). Fluency in symbolic arithmetic refines the approximate number system in parietal cortex. Poster presented at the Neuroscience Graduate Program IGP/QCB orientation day. Vanderbilt University, Nashville, Tennessee, USA.

**Suárez Pellicioni, M.** & Booth, J.R. (2018). Fluency in symbolic arithmetic refines the approximate number system in parietal cortex. Poster presented at the Flux conference. Chapel Hill, North Carolina, USA.

**Suárez Pellicioni, M.** & Booth, J.R. (2018). Fluency in symbolic arithmetic refines the approximate number system in parietal cortex. Poster presented at the 12th Annual Vanderbilt University Postdoctoral Association. Nashville, Tennessee, USA.

**Suárez Pellicioni, M.** & Booth, J.R. (2017). The longitudinal brain changes associated with improvement in multiplication depend on verbal IQ. Poster presented at the 2017’s Math Cognition and Learning Society Conference. Nashville, Tennessee, USA.

Demir-Lira, Ö. E., **Suárez Pellicioni, M.** & Booth, J.R. (2017). Relations between attitudes towards math and neural basis of arithmetic processing vary with parental socioeconomic status. Talk presented by Dr. Demir-Lira at the 2017’s Biennial Meeting of the Society for Research in Child Development (SRCD). Austin, Texas, USA.

**Suárez Pellicioni, M.** & Booth, J.R. (2017). The recruitment of brain regions over time depends both on improvement and verbal ability. Poster presented at the 2017’s Biennial Meeting of the Society for Research in Child Development (SRCD). Austin, Texas, USA.

Cerda, V., **Suárez Pellicioni,** **M.,** Dickson DS, Booth JR, Wicha NYY. (2017) Processing Multiplication in Different Languages Involves Activation of the Same Temporal Cortices in Spanish-English Bilingual Adults. Poster presented at the UTSA College of Sciences Research Conference. Oct 2017; San Antonio, TX.

Núñez Peña, M.I., Bono, R. & **Suárez Pellicioni, M.** (2017). Anxiety towards exams and higher education achievement: Differences between sexes? (English translation from Spanish). Poster presented at the 9a Trobada de Professorat de Ciències de la Salut. Barcelona, Spain.

Bono, R., Núñez Peña, M.I. & **Suárez Pellicioni, M.** (2017). Continuous assessment with rubrics and in-class feedback: perceived utility in Research Designs students. (English translation from Spanish). Poster presented at the 9a Trobada de Professorat de Ciències de la Salut. Barcelona, Spain.

Demir-Lira, Ö.E., **Suárez Pellicioni, M.,** Binzak, J. & Booth, J.R. (2016). The neural basis of multiplication varies depending on math skill and attitudes towards math. Short talk given at the Fifth Annual Communication Sciences and Disorders Research Blitz. Austin, Texas, USA.

Núñez Peña, M.I., **Suárez Pellicioni, M.** & Bono, R., (2016). Gender differences in test anxiety and its impact on higher education students’ academic achievement. Poster presented at the 2nd International Conference on Higher Education Advances (HEAD). Valencia, Spain.

Núñez Peña, M.I., **Suárez Pellicioni, M.** & Bono, R., (2016). Rubrics use and in-class feedback in higher education: Students' perceptions and their effect on academic achievement. Poster presented at the 2nd International Conference on Higher Education Advances (HEAD). Valencia, Spain.

Bono, R., Núñez-Peña, M.I. & **Suárez Pellicioni, M.** (2016). Rubrics and in-class feedback: students' perceived usefulness for learning in a Research Design course. Poster presented at the 2016’s Royal Statistical Society (RSS) International Conference. Manchester, England.

Núñez-Peña, M.I. & **Suárez Pellicioni, M**. (2015). Psychological correlates of multi-digit additions processing in high math-anxious individuals. Poster presented at the 16th Congress of the Spanish Society of Neuroscience. Granada, Spain.

Bono, R., Núñez-Peña, M.I. & **Suárez Pellicioni, M.** (2015). Teachers’ feedback as a factor associated with academic performance: The Research Designs case*.* (English translation from Spanish). Poster presented at the IV Congreso Internacional de Docencia Universitaria (CINDU). Vigo, Spain.

Núñez-Peña, M.I. & **Suárez Pellicioni, M**. (2015). Processing of multi-digit additions in high math-anxious individuals: An event-related potential study. Poster presented at the2015’s European Brain and Behaviour Society EBBS Joint Meeting**.** Verone, Italy.

**Suárez Pellicioni, M**., Núñez Peña, M.I. & Colomé, À. (2015). Attentional bias in high math-anxious: a study with the Emotional Stroop task.(English translation from Spanish). Poster presented at the 3rd Jornada de Doctorat de la Facultat de Psicologia. Barcelona, Spain.

Bono, R., Núñez-Peña, M.I., **Suárez Pellicioni, M**., González, C. & Bayés, I. (2015). Continuous formative assessment in the Research Designs course: Application of a correction template system. (English translation from Spanish). Poster presented at the XIV Congreso de Metodologia de las Ciencias Sociales y de la Salud. Mallorca, Spain.

Núñez-Peña, M.I. & **Suárez Pellicioni, M**. (2014). Differences in the representation of numeric magnitude related to math anxiety: Psychophysiological evidence*.* (English translation from Spanish).Poster presented at the X Congress of the Spanish Society of Experimental Psychology (SEPEX) and IX Congress of the Spanish Society of Psychophysiology and Cognitive and Affective Neuroscience (SEPNECA). Murcia, Spain.

**Suárez Pellicioni, M**., Núñez-Peña, M.I. & Colomé, À. (2014). Numeric conflict monitoring and adaptation in high math-anxious individuals: An event-related potential study*.* (English translation from Spanish). Poster presented at the X Congress of the Spanish Society of Experimental Psychology (SEPEX) and IX Congress of the Spanish Society of Psychophysiology and Cognitive and Affective Neuroscience (SEPNECA). Murcia, Spain.

**Suárez Pellicioni, M**., Núñez-Peña, M.I. & Colomé, À. (2014). Attentional bias in high math-anxious individuals: A study with the emotional Stroop task*.* (English translation from Spanish). Poster presented at the X Congress of the Spanish Society of Experimental Psychology (SEPEX) and IX Congress of the Spanish Society of Psychophysiology and Cognitive and Affective Neuroscience (SEPNECA). Murcia, Spain.

Núñez-Peña, M.I., Bono Cabré, R. & **Suárez Pellicioni, M**. (2014). Formative assessment in higher education: Impact in students with high level of math anxiety*.* (English translation from Spanish). Poster presented at the International Congress for University Teaching and Innovation. Tarragona, Spain.

Núñez-Peña, M.I. & **Suárez Pellicioni, M**. (2014). Event-related potentials reveal math anxiety effects on elementary numerical cognition. Poster presented at the 9th Forum of Neuroscience (FENS). Milan, Italy.

**Suárez Pellicioni, M**., Núñez-Peña, M.I. & Colomé, À. (2014). Reactive recruitment of attentional control in math anxiety: An ERP study. Poster presented at the 2nd International Conference of the European Society for Cognitive and Affective Neuroscience (ESCAN). Dortmund, Germany.

Núñez-Peña, M.I. & **Suárez Pellicioni, M**. (2013). Individual differences in Event-related brain potentials in a number-matching task. Poster presented at the 45th European Brain and Behavioral Society Meeting. Munich, Germany.

**Suárez Pellicioni, M.,** Núñez-Peña, M.I. & Colomé, A. (2013). Abnormal error monitoring in math-anxious individuals: evidence from error-related brain potentials.Poster presented at the 53rd Annual meeting of the Society for Psychophysiological Research. Florence, Italy.

Núñez-Peña, M.I., Guilera, G. & **Suárez Pellicioni, M**. (2013). SIMA: A single-item math anxiety scale. (English translation from Spanish). Poster presented at the XIII Congress of Health and Social Sciences Methods (AEMCCO). Tenerife, Spain.

Núñez-Peña, M.I., **Suárez Pellicioni, M**., Bono, R. & Arnau, J. (2013). Continuous learning by means of feedback and correction of errors in the Research Designs course. (English translation from Spanish). Poster presented at the XIII Congress of Health and Social Sciences Methods (AEMCCO). Tenerife, Spain.

Núñez-Peña, M.I., Guilera, G. & **Suárez Pellicioni**, M. (2013). The Single-Item Math Anxiety scale (SIMA): An alternative way of measuring mathematical anxiety. Poster presented at the International society for the study of individual differences meeting (ISSID). Barcelona, Spain.

**Suárez Pellicioni**, M., Núñez-Peña, M.I & Colomé, À. (2013). Individual differences in error monitoring in high math-anxious individuals. Poster presented at the International society for the study of individual differences meeting. Barcelona, Spain.

Núñez-Peña, M.I. & **Suárez Pellicioni, M.** (2012). The effect of arithmetic proficiency on solving subtractions: ERP evidence. Poster presented at the 16th World Congress of Psychophysiology. Pisa, Italy.

Núñez-Peña, M.I., **Suárez Pellicioni, M.,** Guilera, G. & Mercadé-Carranza, C. (2012). A Spanish Version of the Short Mathematics Anxiety Rating Scale (sMARS). Poster presented at the V European Congress of Methodology. Santiago de Compostela, Spain.

**Suárez Pellicioni, M**. & Núñez-Peña, M.I. (2012). Arithmetic ability effect on the processing of false solutions in subtractions. Poster presented at the 8th Forum of Neuroscience (FENS). Barcelona, Spain.

Núñez-Peña, M.I., **Suárez Pellicioni, M**., Bono, R. & Mercadé-Carranza, C. (2012). The effect of emotional and attitudinal factors in Superior Education achievement. (English translation from Spanish). Poster presented at the VIII International Congress of University Teaching and Innovation (CIDUI). Barcelona, Spain.

**Suárez Pellicioni, M.**, Núñez-Peña, M.I. & Colomé, A. (2012). Maths anxiety effect on simple arithmetic processing: An event-related potential study. (English translation from Spanish). Poster presented at the VIII Congress of the Spanish Society of Psychophysiology and Cognitive and Affective Neuroscience.Barcelona, Spain.

**Suárez Pellicioni, M.**, Núñez-Peña, M.I. & Colomé, A. (2012). Math anxiety effects on the processing of incorrect solutions in simple arithmetic. Poster presented at the First Conference of the European Society for Cognitive and Affective Neuroscience. Marseille, France.

**Suárez Pellicioni, M**. & Núñez-Peña, M.I. (2011). Differences between high- and lower-skilled arithmetic problem solvers when solving incongruities in additions. Poster presented at the XI International Conference on Cognitive Neuroscience (ICON). Palma de Mallorca, Spain.

Núñez-Peña, M.I, Colomé, A., Tubau, E., **Suárez Pellicioni, M**. & Johnson, E. (2011). Cognitive processing during arithmetic calculation: Study with behavioral and psychophysiological measures. (English translation from Spanish). Poster presented at the First Meeting of Research in Brain, Cognition, Behavior, and Mental Health. Barcelona, Spain.

**Suárez Pellicioni, M**. & Núñez-Peña, M.I. (2010). Split effect in arithmetic: Individual differences in the pattern of event-related potentials. (English translation from Spanish). Poster presented at the VII National Congress of the Spanish Society of Psychophysiology and Cognitive and Affective Neuroscience (SEPNECA). Valencia, Spain.

Núñez-Peña, M.I., **Suárez Pellicioni, M**., Gracia-Bafalluy, M. & Tubau, E. (2010). Individual differences in arithmetical ability shown in event-related potentials*.* (English translation from Spanish). Communication presented by Dr. Núñez-Peña at the VII National Congress of the Spanish Society of Psychophysiology and Cognitive and Affective Neuroscience (SEPNECA). Valencia, Spain.

**OTHER TALKS**

Academic Job Panel. Brown Bags, Department of Educational Studies in Psychology, Research Methods, and Counseling. (August 26th, 2020).

**GRANTS/FELLOWSHIPS**

Title: Request for purchasing a Magnetic Resonance Imaging (MRI) Scanner. Type: Instrumentation grant. Funding Agency: National Science Foundation PIs: Dr. Rajesh Kana.

Title: Cognitive processing during arithmetic calculation: Study with behavioral and psychophysiological measures. Type: Pre-doctoral fellowship. Funding Agency: Spanish Ministry of Science and Innovation. PI: Dr. María Isabel Núñez-Peña Duration: 4 years.

Title: Math anxiety: Its impact on performance and the brain. Type: International research stay grant. Funding Agency: Spanish Ministry of Science and Innovation. PI: Dr. María Isabel Núñez-Peña. Duration: 3 months.

**TEACHING EXPERIENCE**

*Topics Educational Neuroscience: Numerical Cognition*.(Fall 2022). Undergraduate level.The University of Alabama. Role: Instructor.

*Readings in Educational Psychology* (Spring & Fall 2021; 2022). Graduate level. The University of Alabama. Role: Instructor.

*Methods and Trends in Educational Neuroscience* (Spring 2020; 2021; 2022). Graduate level. The University of Alabama. Role: Instructor.

*Neuroimaging.* (Spring 2022). Undergraduate level. The University of Alabama. Role: Instructor.

*Advanced Educational Psychology* (Summer 2020; 2021; 2022 and Fall 2020; 2021; 2022). Graduate level. The University of Alabama. Role: Instructor.

*Research techniques* (2013-2014). Undergraduate level. The University of Barcelona. Role: Taught practical classes for the last month of the course.

*Mathematical cognition and numeric processing dysfunctions* (2012-2013). Undergraduate level. The University of Barcelona. Role: Guest lecture.

*Research designs* (2010-2011, 2012-2013). Undergraduate level. The University of Barcelona. Role: Taught practical classes for the last month of the course.

**STUDENT TRAINING FOR DATA COLLECTION PURPOSES**

Clara Mercadé (Undergraduate student, The University of Barcelona)

Elisabet Gimeno (Undergraduate student, The University of Barcelona)

Cristina Gallusca (Undergraduate student, The University of Barcelona)

Alba Riu (Undergraduate student, The University of Barcelona)

Antonis Fillipousis (Undergraduate student, The University of Barcelona)

Catherine Huertas (Undergraduate student, The University of Barcelona)

Carmen Prieto (Undergraduate student, The University of Barcelona)

José Manuel Álvarez (Undergraduate student, The University of Barcelona)

Carla Torrijos (Undergraduate student, The University of Barcelona)

Marina Gonzalez (Undergraduate student, The University of Barcelona)

**MENTORING**

Safa Mohamed (Undergraduate student, The University of Texas at Austin). Project: fMRI data quality control, reorientation of images, and quantification of movement.

Nicole Paradis (Undergraduate student, Vanderbilt University). Project: Brain correlates of two-digit subtraction processing.

Chuyan Qu (Undergraduate student, Beijing Normal University visiting Vanderbilt University) Project: Do children improve in single-digit subtraction over time by relying on verbal or quantity manipulation mechanisms?

Arnav Pillai (Undergraduate student, Vanderbilt University). Project: Brain correlates of attitudes towards math: A longitudinal perspective.

**MEMBER OF DISSERTATION COMMITTEES**

Vanessa Cerda, Ph.D. candidate at The University of Texas at San Antonio. Title: How do bilingual children process simple arithmetic in each of their languages? Graduated on 06/03/2022.

Brian Rivera, Ph.D. candidate at The University of Alabama. Title: Understanding rational number processing and its relation to mathematical development. Graduated on 10/7/2022.

Monalisa Anchan, Ph.D. candidate at the University of Alabama. Title: Examining the Neural Processes of Math Cognition in English Learners and English Speakers: An Electroencephalography Study.

**OTHER TEACHING MERITS**

Design of teaching materials: Núñez-Peña, M.I., Bono, R. & Suárez Pellicioni, M. (2013) Research Designs in Psychology: Students’ Autonomous activity. (English translation from Spanish). <http://diposit.ub.edu/dspace/handle/2445/45192>

Collaboration in Educative intervention project: Title: Correction templates as an instrument for continuous formative assessment in the Research Design course (English translation from Catalan). Funding agency: University of Barcelona. Period: 2015. PI: Dr. Roser Bono.

Collaboration in Educative intervention project. Title: Continuous Evaluation in the Research Designs course: Reduction of the effect of math anxiety on students’ academic achievement (English translation from Catalan). Funding agency: University of Barcelona. Period: 2013. PI: Dr. María Isabel Núñez Peña.

**AWARDS**

Williams Fund Award given by the Capstone International Center and Office of Academic Affairs to attend the Math Cognition and Learning Society conference in Ireland (canceled due to COVID).

International mention of Ph.D.: Awarded to Ph.D. theses written and defended in English, with one of three committee members being from outside the institution and another member being from outside the country.

2014’s Ph.D. Extraordinary Award from the Faculty of Psychology, University of Barcelona (Spain) given to the best Ph.D. thesis of the year in each discipline.

“*Abnormal error monitoring in math-anxious individuals: evidence from error-related brain potentials”* published in PLoS ONE, was chosen as the “*Article of the month*” in April 2014, by the members of the Institute for Brain, Cognition, and Behaviour (IR3C).

**OTHER MERITS**

Graduate Faculty, Associate Member. The University of Alabama. Appointment: 8/7/2020-5/15/2026.

Excellence in Online Teaching. The University of Alabama. 8/16/2022.

**EDITORIAL ACTIVITY**

**Editorial Board**

Brian Sciences: January 2020-present.

**Review editor**

Frontiers in Education: May 2022.

Frontiers in Psychology: September 2022.

**Ad Hoc reviewer**

Social Cognition and Affective Neuroscience

Frontiers in Psychology

Plos One

Thinking and Reasoning

Cognition

Journal of Numerical Cognition

Journal of Experimental Child Psychology

Cerebral Cortex Communications

Current Psychology

Annals of the New York Academy of Sciences

Brain Structure and Function

Neuropsychologia

Developmental Science

Mind, Brain, and Education

**CONFERENCE REVIEWER COMMITTEES**

Member of the Program Committee for the 3rd International Conference on Higher Education Advances. June 21 - 23, 2017. Valencia, Spain.

Reviewer for the 4th Math Cognition and Learning Society conference (August-May 2021; online).

**PROFESSIONAL ORGANIZATIONS**

I**nternational Mind, Brain and Education Society (IMBES)**

**Society for Research in Child Development (SRCD)**

**Mathematical Cognition and Learning Society (MCLS)**

**TECHNIQUES OR SPECIALITIES**

ERP data collection and analysis: EEMagine V2.2.0.3, EEProbe V3.1, sLORETA

Stimuli presentation: E-prime 2.0

Data analysis: Excel, SPSS

fMRI data analysis:MATLAB, AFNI, SPM, FSL, MRIcron.

**OTHER TRAINING**

Level 1 fMRI training (02/05/2016, The University of Texas at Austin).

Level 2 fMRI training (04/29/2016, The University of Texas at Austin).

Level 1 fMRI training (11/15/2017, Vanderbilt University).

Level 1 fMRI training (03/12/2019, The University of Alabama).

**LANGUAGES**

Spanish (Native)

English (Professional)

Catalan (Advanced)

**REFERENCES**

Available by request.