

Dr. Nicolás Marchant

Center of Social and Cognitive Neuroscience
Universidad Adolfo Ibáñez
Av. Diagonal las Torres, 2640, Peñalolen
Santiago, Chile

Phone: +56 9 9013 37 79
Email: nicolas.merchant@edu.uai.cl
Website: [Google Scholar](#)
ORCID iD: orcid.org/0000-0001-7891-1005

Education

- 2019–2023 Ph.D., Social Neuroscience and Cognition, Universidad Adolfo Ibáñez
Supervisor: Dr. Sergio Chaigneau
- 2022 Visiting researcher, University of Edinburgh
Bramley Computational Cognitive Science Lab.
- 2014–2019 Psychology, Universidad del Desarrollo

Work experiences

- 2023–2025 Postdoctoral researcher, James S. McDonnell Foundation (JSMF). Project: "[A method for studying shared meaning in cultural groups](#)"
- 2021– Lecturer, Universidad Adolfo Ibáñez
- 2022– Lecturer, Universidad del Desarrollo
- 2021–2022 Research assistant, Fondecyt N° 1200139, Universidad Adolfo Ibáñez
- 2019–2022 Research assistant, Fondecyt N° 1190006, Universidad Adolfo Ibáñez
- 2018 Research assistant, Cognitive Science Lab. Universidad del Desarrollo
- 2016–2019 Teaching assistant, Universidad del Desarrollo

Publications

Journals

- [1] Chaigneau, S. E., **Marchant, N.**, Canessa, E., & Aldunate, N. (*in press*). A Mathematical model of semantic access in Lexical and Semantic decisions. *Language and Cognition*.
- [2] Toro-Hernández, F., Migeot, J., **Marchant, N.**, Olivares, D., Ferrante, F., González-Gómez, R., González Campo, C., Fittipaldi, S., Rojas-Costa, G., Moguilner, S., Slachevsky, A., Chaná Cuevas, P., Ibáñez, A., Chaigneau, S., & García, A. (2024). Neurocognitive correlates of semantic memory navigation in Parkinson's disease. *npj Parkinson's Disease*, 10, 15. DOI: [10.1038/s41531-024-00630-4](https://doi.org/10.1038/s41531-024-00630-4)

- [3] Ramos, D., Moreno, S., Canessa, E., Chaigneau, S. E., & **Marchant, N.** (2023). AC-PLT: An algorithm for computer-assisted coding of semantic property listing data. *Behavior Research Methods*. DOI: [10.3758/s13428-023-02260-9](https://doi.org/10.3758/s13428-023-02260-9)
- [4] **Marchant, N.**, Quillien, T., & Chaigneau, S. E. (2023). A context-dependent Bayesian account for causal-based categorization. *Cognitive Science*, 47(1). DOI: [10.1111/cogs.13240](https://doi.org/10.1111/cogs.13240)
- [5] **Marchant, N.**, & Chaigneau, S. E. (2022). On the importance of feedback for categorization: Revisiting category learning experiments using an Adaptive Filter model. *Journal of Experimental Psychology: Animal Learning & Cognition*, 48(4), 295-306. DOI: [10.1037/xan0000339](https://doi.org/10.1037/xan0000339)
- [6] **Marchant, N.**, & Chaigneau, S. E. (2022). Computational Cognitive models of Categorization: Predictions under conditions of classification uncertainty. *Psykhe*. DOI: [10.7764/psykhe.2021.37971](https://doi.org/10.7764/psykhe.2021.37971)
- [7] **Marchant, N.**, Canessa, E., & Chaigneau, S. E. (2022). An Adaptive Linear Filter model of procedural category learning. *Cognitive Processing*. DOI: [10.1007/s10339-022-01094-1](https://doi.org/10.1007/s10339-022-01094-1)

Proceedings (Peer-reviewed)

- [1] **Marchant, N.**, Quillien, T., & Chaigneau, S. E. (2023). Uncertainty can explain apparent mistakes in causal reasoning. *Proceedings of the 45th Annual Meeting of the Cognitive Science Society*. URL: escholarship.org/uc/item/6j55z9dd
- [2] **Marchant, N.**, Zhao, B., Bramley, N. R., Morales, D., & Chaigneau, S. E. (2022). Categorizing perceived causal events. *Proceedings of the 44th Annual Meeting of the Cognitive Science Society*. URL: escholarship.org/uc/item/0gj4r0k2
- [3] **Marchant, N.**, & Chaigneau, S. E. (2021). Designing probabilistic category learning experiments: The probabilistic prototype distortion task. *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. URL: escholarship.org/uc/item/0cs145c6
- [4] **Marchant, N.**, & Chaigneau, S. E. (2020). Modulating coherence effect in causal-based processing. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.

Book chapters

- [1] **Marchant, N.**, Canessa, E., & Chaigneau, S. E. (2023). *Challenges from Probabilistic Learning for Models of Brain and Behavior*. In: Veloz, T., Khrennikov, A., Toni, B., Castillo, R.D. (eds) Trends and Challenges in Cognitive Modeling. STEAM-H: Science, Technology, Engineering, Agriculture, Mathematics & Health. Springer, Cham. DOI: [10.1007/978-3-031-41862-4_6](https://doi.org/10.1007/978-3-031-41862-4_6)
- [2] Canessa, E., Chaigneau, S. E., & **Marchant, N.** (2023). *Use of Agent-Based Modeling (ABM) in Psychological Research*. In: Veloz, T., Khrennikov, A., Toni, B., Castillo, R.D. (eds) Trends and Challenges in Cognitive Modeling. STEAM-H: Science, Technology, Engineering, Agriculture, Mathematics & Health. Springer, Cham. DOI: [10.1007/978-3-031-41862-4_2](https://doi.org/10.1007/978-3-031-41862-4_2)

Teaching

2023	Undergraduate thesis methodological supervision	Universidad del Desarrollo
2023–2024	Quantitative methods	Universidad del Desarrollo
2023–2024	Cognition, emotion & decision making	Universidad Adolfo Ibáñez
2022–2023	Research methods	Universidad del Desarrollo
2022–2023	Neural basis of behavior	Universidad Adolfo Ibáñez
2021	Psychological process	Universidad Adolfo Ibáñez
2021	Neuroscience and behavior	Universidad Adolfo Ibáñez

Teaching Assistant

2019–2021	Undergraduate methodological supervision	Universidad del Desarrollo
2018–2019	Research methods	Universidad del Desarrollo
2017–2018	Psychological theories	Universidad del Desarrollo
2016	Neuroscience	Universidad del Desarrollo

Supervision

2023	Diego Garrido, M.Sc	Universidad Adolfo Ibáñez
------	---------------------	---------------------------

Selected Honours and Awards

2023	Best 2023 Ph.D. thesis, Scientific Society of Psychology, Chile
2019–2023	Universidad Adolfo Ibáñez Ph.D. Studentship

Conference Presentations

- [1] **Marchant, N.**, & Chaigneau, S. E. (2023). "Declarative retrieval may reveal emerging rules under probabilistic feedback in category learning". 64th Psychonomic Society Annual Meeting, Poster. San Francisco, USA.
- [2] **Marchant, N.**, Quillien, T., & Chaigneau, S. E. (2023). "Uncertainty can explain apparent mistakes in causal reasoning". 45th Annual Meeting of the Cognitive Science Society, Poster. Sidney, Australia (online).

- [3] González, R., **Marchant, N.**, & Chaigneau, S. E. (2023). "Exploring the nuances of democratic ideals: insights from a semantic clustering analysis in Chile". WAPOR 76th Annual Conference, Salzburgo, Austria.
- [4] **Marchant, N.**, Zhao, B., Bramley, N. R., Morales, D., & Chaigneau, S.E. (2022). "Categorizing perceived causal events". 44th Annual Meeting of the Cognitive Science Society, Poster. Toronto, Canada (online).
- [5] **Marchant, N.**, & Chaigneau, S. E. (2021). "Designing probabilistic category learning experiments: The probabilistic prototype distortion task". 43rd Annual Conference of the Cognitive Science Society, Talk. Vienna, Austria (online).
- [6] **Marchant, N.**, & Chaigneau, S. E. (2021). "Towards a probabilistic representation of perceptual category learning: The Probabilistic Prototype Distortion Task". VII Conference of the Scientific Society of Psychology, Poster. Concepción, Chile (online).
- [7] **Marchant, N.**, & Chaigneau, S. E. (2020). "Modulating the coherence effect in causal-based processing". 42nd Annual Conference of the Cognitive Science Society, Poster. Toronto, Canada (online).

Professional Activities

- Reviewer, Journal of Experimental Psychology: Learning, memory & cognition.
- Reviewer, Cognitive Science Journal.
- Reviewer, American Journal of Psychology.
- Reviewer, Proceedings of the Cognitive Science Society.

Software

Advanced	R and R Studio; SPSS, JASP, Microsoft Excel
Intermediate	Python; SciKit Learn; MATLAB
Basic	Adobe Illustrator

Languages

Spanish	Native
English	Fluent

Updated: January 26, 2024