Miriam Tortajada Gomariz

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Education and training

2025-Currently: **Postdoctoral fellow** at the University of Granada (CONNECT project).

2020-2024: **Ph.D. Experimental Psychology** (cum Laude, international mention). Thesis title: Selection, Maintenance, and Removal of Working Memory Contents: A Behavioral and Electrophysiological Approach. Advisors: Prof. Luis J. Fuentes Melero and Prof. Guillermo Campoy.

March-May 2024: **Research stay** at Leibniz Research Centre for Working Environment and Human Factors in Dortmund (Supervisor: Michael Nitsche)

May-July 2022: **Research stay** at the Vrije Universiteit Amsterdam (Supervisor: Christian N.L. Olivers).

2019-2020: **M.S. Behavioral and Cognitive Neuroscience**. University of Granada, Spain (Average grade: 9.58/10).

2015-2019: **B.A. Psychology**. University of Murcia, Spain (Bachelor's Degree Extraordinary Award).

Teaching

- Perception (University of Murcia, 2024/2025) 90 hours
- Attention and Executive Functions (University of Murcia, 2020/2021, 2021/2022 and 2022/2023) – 140 hours (Student rating: 4.17/5)
- Memory (University of Murcia, 2020/2021) 40 hours
- Undergraduate final degree thesis supervision (2020-2024):
 - 2 mentoring (one of them with honors and awarded as best Undergraduate Thesis Project by the COP of Murcia)
 - 4 co-mentoring (one with honors)
- Unique coordinator of the teaching innovation project during Attention and Executive Functions, 2021/22
- Collaborator since 2021 in the innovation teaching group: AppLab Desarrollo de aplicaciones web y móviles para la realización de prácticas de laboratorio y otras actividades docentes

Research (14)

- Ongoing projects (1):
- **Tortajada, M.**, Rodríguez-Larios, J., Martínez-Pérez, V., Palmero, L. B., Melero, L. F., & Campoy, G. (In preparation). Studying the effects of theta exogenous entrainment considering working memory baseline and task difficulty. (Preregistration: https://doi.org/10.17605/OSF.IO/GHQK6)
 - Published articles (13 JCR):
- **Tortajada, M.**, Martínez-Pérez, V., Palmero, L. B., Fuentes, L. J., & Campoy, G. (In press). Distinguishing between temporary and permanent removal in verbal working memory. *Journal of Experimental Psychology: Learning, Memory and Cognition*.
- Sandoval-Lentisco, A., **Tortajada, M**., López-Nicolás, R., López-López, J. A., Wagenmakers, E. J., Sánchez-Meca, J., & Hardwicke, T. E. (2025). Preregistration of psychology meta-analyses: A cross-sectional study of prevalence and practice. *Advances in Methods and Practices in Psychological Science*, 8(1). https://doi.org/10.1177/25152459241300113
- **Tortajada, M.**, Fahrenfort, J. J., Sandoval-Lentisco, A., Martínez-Pérez, V., Palmero, L. B., Castillo, A., Fuentes, L. J., Campoy, G., & Olivers, C. N. L. (2024). Decoding load or selection in visuospatial working memory? *Psychophysiology*, 00, e14636. https://doi.org/10.1111/psyp.14636
- Sandoval-Lentisco, A. López-Nicolás, R., **Tortajada, M.**, López-López, J.A., Sánchez-Meca, J. (2024). Transparency in Cognitive Training Meta-analyses: A Meta-Review. *Neuropsychology Review*, 1-18. https://doi.org/10.1007/s11065-024-09638-2
- Palmero, L. B., Martínez-Pérez, V., **Tortajada, M**., Campoy, G., & Fuentes, L. J. (2024). Testing the modulation of self-related automatic and others-related controlled processing by chronotype and time-of-day. *Consciousness and Cognition*, 118, 103633. https://doi.org/10.1016/j.concog.2023.103633
- Palmero, L. B., **Tortajada, M.**, Martínez-Pérez, V., Sandoval-Lentisco, A., Campoy, G., & Fuentes, L. J. (2024). Circadian modulation of the time course of automatic and controlled semantic processing. *Chronobiology International*, 1-15. https://doi.org/10.1080/07420528.2024.2312806
- Martínez-Pérez, V., Sandoval-Lentisco, A., **Tortajada, M.**, Palmero, L. B., Campoy, G., & Fuentes, L. J. (2024). Self-prioritization effect in the attentional blink paradigm: Attention-based or familiarity-based effect? *Consciousness and Cognition*, 117, 103607. https://doi.org/10.1016/j.concog.2023.103607
- Sandoval-Lentisco, A., **Tortajada, M.**, Palmero, L. B., Campoy, G., Fuentes, L. J., & Martínez-Pérez, V. (2024). Propiedades psicométricas de la adaptación española de la Clance Impostor Phenomenon Scale (S-CIPS). *Anales de Psicología/Annals of Psychology*, 40(1), 38-43. https://doi.org/10.6018/analesps.537361

- Martínez-Pérez, V., Andreu, A., Sandoval-Lentisco, A., **Tortajada, M.**, Palmero, L. B., Castillo, A., ... & Fuentes, L. J. (2023). Vigilance decrement and mind-wandering in sustained attention tasks: Two sides of the same coin? *Frontiers in neuroscience*, 17, 1122406. https://doi.org/10.3389/fnins.2023.1122406
- Martínez-Pérez, V., **Tortajada, M.**, Palmero, L. B., Campoy, G., & Fuentes, L. J. (2022). Effects of transcranial alternating current stimulation over right-DLPFC on vigilance tasks depend on the arousal level. *Scientific Reports*, 12(1), 547. https://doi.org/10.1038/s41598-021-04607-8
- Luna, F. G.*, **Tortajada, M.***, Martín-Arévalo, E., Botta, F., & Lupiáñez, J. (2022). A vigilance decrement comes along with an executive control decrement: Testing the resource-control theory. *Psychonomic Bulletin & Review*, 29(5), 1831-1843. https://doi.org/10.3758/s13423-022-02089-x **shared first authorship
- Palmero, L. B., Martínez-Pérez, V., **Tortajada, M.**, Campoy, G., & Fuentes, L. J. (2022). Mid-luteal phase progesterone effects on vigilance tasks are modulated by women's chronotype. *Psychoneuroendocrinology*, 140, 105722.
- Martínez-Pérez, V., Baños, D., Andreu, A., **Tortajada, M.**, Palmero, L. B., Campoy, G., & Fuentes, L. J. (2021). Propensity to intentional and unintentional mind-wandering differs in arousal and executive vigilance tasks. *PLoS one*, 16(10), e0258734.

Scientific divulgation and transference (3)

- Sandoval-Lentisco, A., **Tortajada, M**., Martínez-Pérez, V., & López-Nicolás, R. (2024). Una rata generada por IA se cuela en una revista de alto impacto o, de nuevo, las limitaciones del Factor de Impacto de una revista para evaluar la calidad de la investigación científica. *Ciencia Cognitiva*, 18:4, 14-16. https://www.cienciacognitiva.org/?p=2402
- Martínez-Pérez, V., Sandoval-Lentisco, A., Campoy, G., Palmero, L. B., Fuentes, L., & **Tortajada, M.** (2024) Desmitificando el éxito: El síndrome del impostor y por qué no es del todo malo experimentarlo. *The Conversation*. https://theconversation.com/desmitificando-el-exito-el-sindrome-del-impostor-y-por-que-no-es-del-todo-malo-experimentarlo-224772
- Collaboration with the chief of **medicine** in the *Hospital Morales Meseguer* to apply the psychological test SCIPS, which we validated to Spanish population: https://doi.org/10.6018/analesps.537361.

Contributions in Congresses (5 main contributions out of 25)

- Poster "Testing the influence of participants' baseline and task load as factors that modulate the effectiveness of theta tACS during working memory maintenance" by Tortajada, M., Martínez-Pérez, V., Palmero, L. B., Roy, S. Melero, L. F., & Campoy, G. (Neuromodulation Conference 2024)
- Poster "Tracking Working Memory Load Or Selection With Multivariate Pattern Analysis From Electroencephalographic Data" by Tortajada, M., Fahrenfort, J. J., Sandoval-Lentisco, A., Martínez-Pérez, V., Palmero, L. B., Melero, L. F., Campoy, G. & Olivers, C. N. L. (ESCOP 2023).
- Poster "Tracking the Time Course of the Removal of Information from Working Memory Using Electrophysiology" by Tortajada, M., Fahrenfort, J. J., Sandoval-Lentisco, A., Martínez-Pérez, V., Palmero, L. B., Melero, L. F., Campoy, G. & Olivers, C. N. L. (Psychonomic Society Meeting 2022).
- Oral communication "Removing information from working memory temporarily or permanently." by M. Tortajada, V. Martínez-Pérez, L. B. Palmero, A. Sandoval-Lentisco, L. J. Fuentes y G. Campoy (SEPNECA 2021).
- Oral communicacion "The vigilance decrement comes along executive control decrement: testing the resources-control hypothesis" Tortajada, M., Luna, F. G., Martín-Arévalo, E., Botta, F., & Lupiáñez, J. (SEPEX 2021).

Organizational activities

- Co-organizer of the ReproducibiliTea journal club at the University of Murcia (2023-Present) (Twitter/X: @ReproTeaUM).
- Teacher representative to the Faculty of Psychology Board during the 2022/23 and 2023/24 academic years.

Awards and Grants

- Mobility grant 2024, funded by the Escuela Internacional de Doctorado de la Universidad de Murcia
- Mobility grant 2022, funded by the Ministry of Universities
- AlIDI 2020 conference grant as one of the best novel contributions.
- **FPU doctoral grant** (Four-year national grant awarded by the Spanish Ministry of Science, Innovation and Universities, 2020)
- Bachelor's Degree Extraordinary Award in Psychology (2019)
- Collaboration grant in the Department of Basic Psychology and Methodology under the supervision of Guillermo Campoy (2018/2019)

Additional education

- Attendance to courses of the Bachelor in **Data Science and Engineering** from the University of Murcia, 1st semester 2023: Linear Algebra, Introduction to Programming with **Python**, Discrete Mathematics
- Course: Data analysis and reproducible research with R (University of Murcia, 2022)
- Course: Ethics and integrity in research and good scientific practices (University of Murcia, 2020)
- Course: Complete neural signal processing and analysis: Zero to hero (Mike X Cohen, Udemy)
- Course: Virtual ERP Boot Camp: Introduction to ERPs (Steve Luck, https://courses.erpinfo.org/courses/Intro-to-ERPs).
- Course: International doctoral summer school 2020. Multivariate pattern analyses of EEG data: theory and practice (University of Granada)
- Course: Introduction to Programming with MATLAB (Coursera)
- C1 English level, Cambridge.
- **B1 French level**, Escuela Oficial de Idiomas (EOI).
- Student intern in the Department of Basic Psychology and Methodology with Professor Guillermo Campoy during the academic year 2016-2017, at the University of Murcia.
- Student intern in the Department of Basic Psychology and Methodology with Professor Julio Sánchez Meca during the academic year 2015-2016, at the University of Murcia.