

Filippo Gambarota

PhD · Assistant Professor in Psychometrics

✉ filippo.gambarota@unipd.it
🌐 github.com/filippogambarota
🔗 orcid.org/0000-0002-6666-1747



Updated October 16, 2026

I am an **Assistant Professor** (RTDa) in Psychometrics (PSIC-01/C) at the University of Padova, Department of Developmental Psychology and Socialization (DPSS) and a **licensed clinical psychologist**.

Research interests:

- Meta-analysis
- Monte Carlo simulations for power and design analysis
- Multiverse analysis
- Statistical methods for replicability assessment

Current position

Assistant Professor (RTD-a) in Psychometrics [PSIC-01/C]

2025 - ongoing

Department of Developmental Psychology and Socialization, University of Padova, Italy

Qualifications

Abilitazione scientifica nazionale (ASN)

2024

Abilitato alla funzione di *professore di seconda fascia* per il settore concorsuale 11/E1, SSD PSIC-01/C (ASN, triennio 2023-2025, quinto quadrimestre) - validità da 03/11/2025 a 03/11/2037. 📄

2020 Licensed Psychologist (Esame di Stato) 📄

Academic roles

Member of the Scientific Committee (Commissione Scientifica) as Researcher's representative (four-year mandate <https://www.dpss.unipd.it/content/dipartimento/commissioni>)

2025 - ongoing

Department of Developmental Psychology and Socialization, University of Padova, Italy

Expert (Cultore della Materia) of Psychometrics (PSIC-01/C ex M-PSI/03)

2023 - 2025

Department of Developmental Psychology and Socialization, University of Padova, Italy

Research

Post-doctoral researcher (1 year research grant - type B)

2023 - 2024

Department of Developmental Psychology and Socialization, University of Padova, Italy

Project: Multiverse meta-analysis (PSIC-01/C ex M-PSI/03) Supervisor: Prof. Gianmarco Altoè

Post-doctoral researcher (2 year research grant - type B)

2024 - 2025

Department of Developmental Psychology and Socialization, University of Padova, Italy

Project: Multiverse meta-analysis (PSIC-01/C ex M-PSI/03) Supervisor: Prof. Gianmarco Altoè

Abroad

Visiting Scholar (1 month, November-December)	2024
<i>Dana Farber Cancer Institute, Harvard University, Boston, United States</i> 	
Research project about replicability in Psychology and Biomedical sciences.	
Supervisor: Professor Giovanni Parmigiani	
Visiting PhD student (6 months, June-December)	2021
<i>University of Tel-Aviv, Israel</i> 	
Research project about the relationship between Working Memory and Consciousness	
Supervisor: Professor Roy Luria	

Education

PhD in Psychological Sciences	2019 - 2023
<i>University of Padova, Italy</i>	
Project: The relationship between visual working memory and consciousness.	
Supervisor: Professor Paola Sessa,	
Co-supervisor: Professor Massimiliano Pastore	
Licensed Psychologist (Esame di Stato)	2020
<i>University of Padova, Italy</i>	
Title obtained on the second session	
Internship	2018 - 2019
<i>Department of Developmental Psychology and Socialization - University of Padova</i>	
Research project about visual consciousness and sensorimotor simulation	
Research project about social cognition during pregnancy Supervision of internship students in EEG laboratory	
M.S. in Clinical Developmental Psychology - 110 cum laude	2018
<i>University of Padova, Italy</i>	
Thesis: Visual Working Memory representations of infant faces during pregnancy as an adaptive mechanism. An EEG study.	
Supervisor: Professor Paola Sessa	
Internship	2018
<i>Department of Developmental Psychology and Socialization - University of Padova</i>	
Research project about social cognition during pregnancy with EEG data collection	
B.S. in Psychology - 110 cum laude	2016
<i>University of Padova, Italy</i>	
Thesis: Psychosocial well-being of adolescents with oncoemathological disease.	
Supervisor: Professor Ughetta Moscardino	
Internship	2016
<i>Hospital of Padova - Pediatrics Oncology</i>	
Educational activities with in-patients children and their families Research about the psychosocial well-being of in-patients adolescents Discussing about clinical cases in regular supervisions	

Training

Advanced meta-analysis (3 days)	2025
<i>Maastricht University</i>	
Intensive course about advanced meta-analysis methods held by Professor Wolfgang Viechtbauer	
Meta-Analysis with Metafor (3 days)	2021
<i>Maastricht University</i>	
Intensive course about meta-analysis with the metafor package held by Professor Wolfgang Viechtbauer	
Bayesian Regression Modeling with BRMS (5 days)	2020
<i>Potsdam University</i>	
Summer School in Bayesian Statistics for Cognitive Psychology	
Bayesian Statistical Analyses for the Human, Social and Cognitive Sciences (5 days)	2019

Awards

Award for the best scientific article of 2024 - Italian Psychological Association (AIP), Developmental and Educational Psychology 2024

The paper Montuori, C., Gambarota, F., Altoé, G., & Arfé, B. (2023). The cognitive effects of computational thinking: A systematic review and meta-analytic study. *Computers & Education*, 210(104961), 104961. <https://doi.org/10.1016/j.compedu.2023.104961> won the award for the best scientific article of 2024, by the Italian Psychological Association (AIP), Developmental and Educational Psychology

Reproducibility Award - Italian Reproducibility Network (ITRN) 2024

I won the **Reproducibility Award** from the Italian Reproducibility Network (ITRN) for the paper: Gambarota, F., & Altoé, G. (2024). Understanding meta-analysis through data simulation with applications to power analysis. *Adv. Methods Pract. Psychol. Sci.*, 7(1). <https://doi.org/10.1177/25152459231209330>

Mission Award to Psicostat by the Society for the Improvement of Psychological Science (SIPS) 2023

As an active member of the Psicostat research group (<https://improvingpsych.org/mission/awards/>)

Teaching

[*planned*] means that the course has been officially scheduled but not delivered yet

PhD courses

Crafting effective scientific presentations 2025 - ongoing

University of Padova

Professor for the course within the PhD program in Psychological Sciences, University of Padova

- 2027 (5 hrs., 1 CFU) — [*planned*]
- June 2026 (5 hrs., 1 CFU)
- March 2025 (5 hrs., 1 CFU)

Generalized Linear Models - PhD Course in Psychological Sciences 2023 - ongoing

University of Padova

Professor for the course within the PhD program in Psychological Sciences, University of Padova

- 2027 (10 hrs., 2 CFU) — [*planned*]
- December 2025 (15 hrs., 3 CFU)
- March 2025 (15 hrs., 3 CFU)
- November 2023 (15 hrs.) — I held the Generalized Linear Models course (Part A and B) within the PhD program in Psychological Sciences, University of Padova

Meta-Analysis: Theory, Methods and Applications 2027

University of Padova

Professor for the course within the PhD program in Psychological Sciences, University of Padova

- 2027 (10 hrs., 2 CFU) — [*planned*]

Replicability crisis in science? 2024 - 2025

University of Padova

- June 2025 (5 hrs.) — Lecturer in the Methodological school about replicability in science organized from the PhD course in Statistical Sciences and Psychological Sciences, University of Padova
- July 2024 (5 hrs.) — **Specialist Course** for the XXXIX Cycle of the PhD course in Statistics, Department of Statistical Sciences, University of Padova

Bachelor's and Master's degree

Analisi dei Dati in Psicologia di Comunità

[SSD : PSIC-01/C]

2026 - ongoing

University of Padova

Professor (titolare del corso) for the Master's degree in Psychology of community, wellness promotion, and social change, Department of Developmental Psychology and Socialization, University of Padova

- March 2027 (42 hrs., 6 CFU) — [planned]
- March 2026 (42 hrs., 6 CFU)

Laboratorio di Analisi dei Dati

[SSD : PSIC-01/C]

2026 - ongoing

University of Padova

Professor (titolare del corso) for the Master's degree in Psychology of community, wellness promotion, and social change, Department of Developmental Psychology and Socialization, University of Padova

- March 2027 (20 hrs., 2 CFU) — [planned]
- March 2026 (20 hrs., 2 CFU)

Psicometria per le Neuroscienze Cognitive (44 hrs., 6 CFU)

[SSD : PSIC-01/C]

2025

University of Padova

Professor (titolare del corso, docenza a contratto) for the Master's degree in Statistical Sciences, Department of Statistical Sciences, University of Padova

Statistical Methods and Data Analysis in Developmental Psychology (21 hrs., 3 CFU) 🌐

[SSD : PSIC-01/C]

2023

University of Padova

Lecturer (titolare di modulo, docenza a contratto) for the Master's degree in Developmental and Educational Psychology, University of Padova

Seminars

Introduction to Bayesian Statistics with R and STAN (30 hrs.) 🌐

2025

CEUB (Bertinoro)

Professor for the intensive course organized by the Italian Psychological Association (AIP) about Bayesian Statistics.

Introduction to R 🌐

2021 - 2024

University of Padova

Intensive course about programming in R as part of the **ARCA (Applied Research Course Academy)** courses, Department of Developmental Psychology and Socialization, University of Padova

- March 2024 (20 hrs.)
- March 2023 (20 hrs.)
- November 2022 (20 hrs.)
- October 2021 (20 hrs.)

The 3 R's of trustworthy science (5 hrs.)

2026

University of Padova

Lecturer in the methodological school about replicability in science organized from the PhD course in Statistical Sciences and Psychological Sciences, University of Padova

Integrative teaching (didattica integrativa)

Data Analysis in Developmental Psychology

[SSD : PSIC-01/C]

2022 - 2023

University of Padova

Lectures about R programming and data analysis of the course "Data Analysis in Developmental Psychology" (Prof. Massimiliano Pastore), Master's degree in Psychology of Community, Wellness Promotion, and Social Change, University of Padova

- March 2023 (15 hrs.)
- March 2022 (20 hrs.)

Psychological Testing (14 hrs.)

[SSD : PSIC-01/C]

2022

University of Padova

Lectures about R programming and data analysis of the course "Psychological Testing" (Prof. Gianmarco Altoè), Bachelor's degree in Developmental, Personality and Interpersonal Relationships Psychology, University of Padova

Methodological Schools

Replicability Crisis in Science? (5 hrs.) 🌐

2023

University of Padova

I held a series of workshops about statistical methods to assess replicability during the summer school **Replicability Crisis in Science?** organized at the Department of Statistical Sciences (University of Padova)

Lectures

Introduction to Visual Consciousness (2 hrs.) 🌐

2021

[SSD : PSIC-01/A]

University of Padova

Lecture during the course "General Psychology" (Prof. Roberto Dell'Acqua), Bachelor's degree in Developmental, Personality and Interpersonal Relationships Psychology, University of Padova

Visual Working Memory in Social Cognition (2 hrs.) 🌐

2021

[SSD : PSIC-01/A]

University of Padova

Lecture during the course "General Psychology" (Prof. Paola Sessa), Bachelor's degree in Techniques and Methods in Psychological Science, University of Padova

Neural Correlates of Consciousness (2 hrs.) 🌐

2020 - 2023

[SSD : PSIC-01/A]

University of Padova

I regularly held a two hours lecture during the course "Mechanism of Consciousness" (Prof. Roberto Dell'Acqua), Master's degree in Applied Cognitive Psychology, University of Padova

Master

In this section are listed teaching activities for 1st/2nd Level University Master (Master di primo e secondo livello)

Estensione dei modelli lineari generalizzati al caso dei modelli con effetti misti (con effetti fissi e random) (21 hrs.)

2026

University of Padova

Professor for the Master (2nd level) for the Master Psicologia quantitativa: misurazione, valutazione e analisi di variabili psicosociali

Statistical and Clinical Significance (4 hrs.)

2026

University of Padova

Professor for the Master (2nd level) in Psicologia delle Micro e Maxi Emergenze

Statistical and Clinical Significance (4 hrs.)

2024

University of Padova

Professor for the Master (2nd level) in Psicologia delle Micro e Maxi Emergenze

School of Specialization

Metodologia Della Ricerca Clinica (21 hrs., 3 CFU)

2026

[SSD : PSIC-01/C]

University of Padova

Professor (titolare del corso) for the Scuola di Specializzazione "Psicologia del ciclo di vita" <https://www.unipd.it/psicologia-ciclo-vita>, Università degli Studi di Padova

Other Teaching

Enactus

2024-2025

University of Padova

Teacher of public speaking skills for the Enactus project (two editions) (7 hrs.)

Three Minutes Thesis Competition (3MT)

2026

University of Padova

Teacher of public speaking skills for the three-minutes thesis competition (3MT) for PhD students (7 hrs.)

Supervision

- I have supervised 2 theses (2 Bachelor's).
- I have co-supervised 13 theses (11 Master's and 2 Bachelor's)
- I have been a thesis examiner (controrelatore) of 7 theses (6 Master's degree theses and 1 Bachelor's degree thesis)
- From 2017 to 2019 I supervised and coordinated the students during EEG training in the laboratory (Department of Developmental Psychology and Socialization, University of Padova, Italy).

Publications

Bibliometric data

I have published **22 papers** on journals with an **average impact factor of 7**. In terms of quartiles, I published **16 papers in Q1 journals (72.73%)**, **6 papers in Q2 journals (27.27%)**.

Google Scholar

Last Update: 2026-10-16

contains preprints, conference proceedings and redundant articles

- H-index: **13**
- Citations: **578**
- Number of articles: **47**

Scopus

Last Update: 2026-10-16

- H-index: **9**
- Citations: **288**
- Number of articles: **22**

Web of Science

Last Update: 2026-10-13

- H-index: **9**
- Citations: **248**
- Number of articles: **22**

Published (22)

Journal impact factors (JIFs) and quartile rankings are based on the 2026 edition of Clarivate's Journal Citation Reports (JCR), reporting 2025 data.

c means that I am the corresponding author

Among the 22 publications, I have **5 first-author papers** and **3 papers** with the role of corresponding author.

1. Di Polito, N., **Gambarota F.**, Hampson, E., & Herlitz, A. (2026). Prenatal androgens and female-advantaged cognition: A systematic review and Bayesian meta-analysis in congenital adrenal hyperplasia. *Neuroscience and Biobehavioral Reviews*, 191, 106877. <https://doi.org/10.1016/j.neubiorev.2026.106877> [IF: 8.5, Quartile: Q1]
2. Franco-Martínez, A., Rey-Sáez, R., Adrián-Ventura, J., Amerio, P., Baciero, A., Bennis, A., Bergström, F., Cleeremans, A., Contu, L., Dell'Acqua, R., Deng, X., Dolu, F. N., **Gambarota F.**, Gao, Y., Garre-Frutos, F., Grubert, A., Hernando, A., Hinojosa, J. A., Hoory, A., ... Vadillo, M. A. (2026). Replicating the unconscious working memory effect: a multisite Registered Report. *Neuroscience of Consciousness*, 2026, niaf046. <https://doi.org/10.1093/nc/niaf046> [IF: 3.8, Quartile: Q1]
3. Talamini, F., Grassi, M., Altoè, G., Brattico, E., Caclin, A., Carretti, B., Draï-Zerbib, V., Ferreri, L., **Gambarota F.**, Grahn, J., Guiotto Nai Fovino, L., Roccato, M., Rodriguez-Fornells, A., Swaminathan, S., Tillmann, B., Vuust, P., Wilbiks, J., Zentner, M., Aguilar, K., ... Zappa, A. (2026). Music Ensemble: a large dataset on musicianship, cognition, and personality in musicians and nonmusicians. *Scientific Data*, 13, 473. <https://doi.org/10.1038/s41597-026-06654-0> [IF: 7.2, Quartile: Q1]
4. Calderan, M., Jongkees, B. J., **Gambarota F.**, Pastore, M., Cellini, N., & Sellaro, R. (2025). Isolating work-

- ing memory gating processes under stress. *Collabra. Psychology*, 11. <https://doi.org/10.1525/collabra.140750>
[IF: 2.6, Quartile: Q2] 
5. Dumitru, E. P., Cardoso, R. A. I., Milea, I., **Gambarota F.**, Altoè, G., David, D. O., & Cristea, I. A. (2025). A meta-analysis of the association of death anxiety with psychological distress and psychopathology. *Nature Human Behaviour*, 1–11. <https://doi.org/10.1038/s41562-025-02115-7>
[IF: 17.5, Quartile: Q1] 
 6. **Gambarota F.**, Luria, R., Maffei, A., Dell'Acqua, R., Tsuchiya, N., & Sessa, P. (2025). Tracking the unconscious: Neural evidence for the retention of unaware information in visual working memory. *Journal of Cognitive Neuroscience*, 1–12. <https://doi.org/10.1162/JOCN.a.100>
[IF: 3, Quartile: Q2] 
 7. Grassi, M., Talamini, F., Altoè, G., Brattico, E., Caclin, A., Carretti, B., Drai-Zerbib, V., Ferreri, L., **Gambarota F.**, Grahn, J., Guiotto Nai Fovino, L., Roccato, M., Rodriguez-Fornells, A., Swaminathan, S., Tillmann, B., Vuust, P., Wilbiks, J., Zentner, M., Aguilar, K., ... Zappa, A. (2025). Do musicians have better short-term memory than nonmusicians? A multilab study. *Advances in Methods and Practices in Psychological Science*, 8. <https://doi.org/10.1177/25152459251379432>
[IF: 14.6, Quartile: Q1] 
 8. Perugini, A., **Gambarota F.**, Toffalini, E., Lakens, D., Pastore, M., Finos, L., Core Team Psicostat, & Altoè, G. (2025). The benefits of reporting critical-effect-size values. *Advances in Methods and Practices in Psychological Science*, 8. <https://doi.org/10.1177/25152459251335298>
[IF: 14.6, Quartile: Q1]
 9. Del Popolo Cristaldi, F., Buodo, G., **Gambarota F.**, Oosterwijk, S., & Mento, G. (2024). How previous experience shapes future affective subjective ratings: A follow-up study investigating implicit learning and cue ambiguity. *PloS One*, 19, e0297954. <https://doi.org/10.1371/journal.pone.0297954>
[IF: 2.8, Quartile: Q2]  
 10. Di Rosa, E., Masina, F., Pastorino, A., Galletti, E., **Gambarota F.**, Altoè, G., Edelstyn, N., & Mapelli, D. (2024). Mood moderates the effects of prefrontal tDCS on executive functions: A meta-analysis testing the affective state-dependency hypothesis. *Journal of Affective Disorders*, 351, 920–930. <https://doi.org/10.1016/j.jad.2024.02.009>
[IF: 5.7, Quartile: Q1] 
 11. c **Gambarota F.**, & Altoè, G. (2024). Ordinal regression models made easy: A tutorial on parameter interpretation, data simulation and power analysis. *International Journal of Psychology: Journal International de Psychologie*, 59, 1263–1292. <https://doi.org/10.1002/ijop.13243>
[IF: 2.4, Quartile: Q2]  
 12. c **Gambarota F.**, & Altoè, G. (2024). Understanding meta-analysis through data simulation with applications to power analysis. *Advances in Methods and Practices in Psychological Science*, 7. <https://doi.org/10.1177/25152459231209330>
[IF: 14.6, Quartile: Q1]  
 13. Maffei, A., **Gambarota F.**, Liotti, M., Dell'Acqua, R., Tsuchiya, N., & Sessa, P. (2024). Conscious perception of fear in faces: Insights from high-density EEG and perceptual awareness scale with threshold stimuli. *Cortex*, 174, 93–109. <https://doi.org/10.1016/j.cortex.2024.02.010>
[IF: 3.2, Quartile: Q1] 
 14. Pezzetta, R., **Gambarota F.**, Tarantino, V., Devita, M., Cattaneo, Z., Arcara, G., Mapelli, D., & Masina, F. (2024). A meta-analysis of non-invasive brain stimulation (NIBS) effects on cerebellar-associated cognitive processes. *Neuroscience and Biobehavioral Reviews*, 157, 105509. <https://doi.org/10.1016/j.neubiorev.2023.105509>
[IF: 8.5, Quartile: Q1] 
 15. Toffalini, E., **Gambarota F.**, Perugini, A., Girardi, P., Tobia, V., Altoè, G., Giofrè, D., Psicostat Core Team, & Feraco, T. (2024). Clusters that are not there: An R tutorial and a Shiny app to quantify a priori inferential risks when using clustering methods. *International Journal of Psychology*. <https://doi.org/10.1002/ijop.13246>
[IF: 2.4, Quartile: Q2] 
 16. Del Popolo Cristaldi, F., **Gambarota F.**, & Oosterwijk, S. (2023). Does your past define you? The role of previous visual experience in subjective reactions to new affective pictures and sounds. *Emotion*, 23, 1317–1333. <https://doi.org/10.1037/emo0001168>
[IF: 3.8, Quartile: Q1]  

17. Montuori, C., **Gambarota F.**, Altoé, G., & Arfé, B. (2023). The cognitive effects of computational thinking: A systematic review and meta-analytic study. *Computers & Education*, 210, 104961. <https://doi.org/10.1016/j.compedu.2023.104961> [IF: 13.2, Quartile: Q1]  
18. Quettier, T., Maffei, A., **Gambarota F.**, Ferrari, P. F., & Sessa, P. (2023). Testing EEG functional connectivity between sensorimotor and face processing visual regions in individuals with congenital facial palsy. *Frontiers in Systems Neuroscience*, 17, 1123221. <https://doi.org/10.3389/fnsys.2023.1123221> [IF: 3.6, Quartile: Q2]
19. **Gambarota F.**, Tsuchiya, N., Pastore, M., Di Polito, N., & Sessa, P. (2022). Unconscious Visual Working Memory: A critical review and Bayesian meta-analysis. *Neuroscience and Biobehavioral Reviews*, 136, 104618. <https://doi.org/10.1016/j.neubiorev.2022.104618> [IF: 8.5, Quartile: Q1]  
20. Verroca, A., Rienzo, C. M. de, **Gambarota F.**, & Sessa, P. (2022). Mapping the perception-space of facial expressions in the era of face masks. *Frontiers in Psychology*, 13, 956832. <https://doi.org/10.3389/fpsyg.2022.956832> [IF: 3.8, Quartile: Q1]  
21. Quettier, T., **Gambarota F.**, Tsuchiya, N., & Sessa, P. (2021). Blocking facial mimicry during binocular rivalry modulates visual awareness of faces with a neutral expression. *Scientific Reports*, 11, 9972. <https://doi.org/10.1038/s41598-021-89355-5> [IF: 4.9, Quartile: Q1] 
22. **Gambarota F.**, & Sessa, P. (2019). Visual working memory for faces and facial expressions as a useful "tool" for understanding social and affective cognition. *Frontiers in Psychology*, 10, 2392. <https://doi.org/10.3389/fpsyg.2019.02392> [IF: 3.8, Quartile: Q1]

Preprints (1)

1. Manente, M., L. Finos, G. Altoè, and F. **Gambarota** (2026). "Post-selection inference in Multiverse Meta-analysis: The PIMMA framework". In: *PsyArXiv*. DOI: 10.31234/osf.io/8ejsn_v1. https://osf.io/preprints/psyarxiv/8ejsn_v1.

Conferences

Invited Talks (7)

- Grassi, M., **Gambarota, F.**
Better together: how to conduct multi-laboratory research 2026
Mathematical Cognition and Learning Society (MCLS) - Padova, Italy
- Gambarota [P], F., Calderan, M.**
Generalized Linear Models for Psychology: Understanding, Simulating, and Planning Your Analyses  2026
Cognitive Science Arena (CSA) - Bressanone, Italy
- Gambarota [P], F.**
Literate Programming with Quarto  2025
Behavioral Neuroscience Conference - Agropoli, Italy
- Gambarota [P], F.**
Open Science Starter Pack  2025
International Winter School 4M - Padova, Italy
- Grassi, M., **Gambarota, F.**
Music Ensemble: An Example of Multi-lab Investigating a Rare Population (Expert Musicians)  2025
International Winter School 4M - Padova, Italy
- Gambarota [P], F., Calignano, G.**
Multiverse analysis in R: Exploratory and Inferential Approaches  2025
Cognitive Science Arena (CSA) - Bressanone, Italy

Gambarota [P], F. and Altoè, G.

Understanding meta-analysis through data simulation with applications to power analysis 🌐

2024

Cognitive Science Arena (CSA) - Bressanone, Italy

Talks (22)

I am the presenting author for **10 of the 22 talks** listed below.

[P] means that I was the presenting author [accepted] means that the talk has been accepted but not delivered yet

Gambarota [P], F., Toffalini, E.

Efficient power analysis methods for complex statistical models 🇮🇹

2026

Italian Psychological Association (AIP), Experimental Psychology - Venice, Italy

Calderan, M., Gambarota, F., Toffalini, E., Altoè, G.

Correcting the Probability of Direction for Multiple Testing

2026

Italian Psychological Association (AIP), Experimental Psychology - Venice, Italy

Gambarota [P], Bruno, G., F., Sellaro, R., Cutini, S.

When less is (sometimes) more. Evaluating the effect of trial number in classical experimental psychology paradigms 🇮🇹

2025

Italian Psychological Association (AIP), Experimental Psychology - Torino, Italy

Bruno, G., Gambarota, F., Sellaro, R., Cutini, S.

The More the Trials, the Stronger the Effect': Fact or Myth? Evidence From Classical Experimental Psychology Paradigms

2025

Society for the Improvement of Psychological Science (SIPS) - Budapest, HUN

Alfarone, I., Gambarota, F., Pastore, M.

Missing outcomes imputation in bivariate meta-analysis

2025

European Mathematical Psychology Group Meeting (EMPG) - Padova, Italy

Manente, M., Gambarota, F., Finos, L., Vesely, A., Altoè, G.

Post-Selection Inference in Multiverse Meta-Analysis (PIMMA): Enhancing Validity and Transparency in Meta-Analytic Inference

2025

European Mathematical Psychology Group Meeting (EMPG) - Padova, Italy

Gambarota [P], F.

Introduction to Multiverse Meta Analysis 🇺🇸

2024

Data Science Training Sessions, Dana Farber Cancer Institute - Boston, USA

Gambarota [P], F., Vesely, A., Finos, L., Altoè, G.

Inference on multiverse meta-analysis

2024

META-REP - Munich, Germany

Gambarota [P], F., Toffalini, E.

Are most interactions false? The importance of the appropriate distribution and link function with non-normal data 🇮🇹

2024

Italian Psychological Association (AIP), Developmental Psychology - Cagliari, Italy

Perugini, A., Gambarota, F., Toffalini, E., Sità, L., Lakens, D., Pastore, M., Finos, L. Psicostat, Altoè, G.

Critical effect size values and why to report them

2024

Italian Psychological Association (AIP), Developmental Psychology - Noto, Italy

Perugini, A., Toffalini, A., Feraco, T., Gambarota, F., Pastore, M., Altoè, G.

Is that a cluster? A practical guide on how to avoid Type I and Type II error

2024

Italian Psychological Association (AIP), Experimental Psychology - Noto, Italy

Calignano, G., Ceccon, C., Gambarota, F., F., Pacheco, S., Russo, S., Altoè, G., Pastore, M., Valenza, E., Moscardino, U.

Communicative development on the move between Minority and Majority worlds

2024

Italian Psychological Association (AIP), Developmental Psychology - Cagliari, Italy

Girardi, P., Vesely, A., Gambarota, F., Altoè, G., Pastore, M., Finos, L.

Exploring the Dark Side of the Multiverse: Pitfalls and Possibilities in Applications

2024

Association for Applied Statistics (ASA) - Rome, Italy

- Gambarota [P], F.**
Inferenza nella meta-analisi multiverse. Un approccio multivariato basato sulle permutazioni 2024
La Psicometria tra Oggi e Domani: Sfide E Nuovi Orizzonti - Firenze, Italy
- Gambarota [P], F.**
Cosa accade al di fuori della consapevolezza visiva? [Italian] 🌐 2024
Brain Awareness Week - Padova, Italy
- Toffalini, E., **Gambarota, F.**
Perché è meglio non usare (praticamente mai) l'analisi dei cluster sulle casistiche in psicologia dello sviluppo 2023
XXXI Congresso Nazionale AIRIPA - Foggia, Italy
- Gambarota [P], F., Luria, R., Sessa, P.**
Conscious and unconscious information processing in visual working memory 📄 2022
Italian Psychological Association (AIP) - Padova, Italy
- del Popolo Cristaldi, F., **Gambarota, F., Oosterwijk, S.**
The role of past experience in subjective ratings to affective predictions: cross-modality effects 2022
Cognitive Science Arena (CSA) - Bressanone, Italy
- del Popolo Cristaldi, F., **Gambarota, F., Oosterwijk, S.**
The role of past visual experience in subjective reactions to new affective pictures and sounds 2022
Annual Conference of the Society for Affective Science (SAS) - Virtual
- Gambarota [P], F., Tsuchiya, N., Pastore, M. Di Polito, N., Sessa, P.**
Meta-analysis in Consciousness Research 📄 2021
Conscious Brain Concepts Workshop - University of Oslo - Virtual
- del Popolo Cristaldi, F., **Gambarota, F., Oosterwijk, S.**
The role of previous probabilistic learning on the subjective affective experience 2021
Italian Psychological Association (AIP) - Lecce, Italy
- Gambarota [P], F., Zandonella Callegher, C., Linkersdörfer, J., Ling, M., Kothe, E.**
trackdown - Collaborative writing through literate programming in R 🌐 2021
Towards Advanced Scientific Knowledge (TASK4) - Virtual

Posters (11)

I am the presenting author for 4 of the 11 posters listed below.

[P] means that I was the presenting author [accepted] means that the poster has been accepted but has not taken place yet

- Calignano, G., Calderan, M., **Gambarota, F., Pretto, M., Marci, T.**
How Much Does Scoring Change the Story? Psychometric Stability in the Heart and Flower Task Through a Multiverse Lens 2026
Italian Psychological Association (AIP), Experimental Psychology - Venice, Italy
- Manente, M., **Gambarota, F., Vesely, A., Finos, L., Altoè, G.**
Promuovere trasparenza e rigore in psicologia: un framework inferenziale multiverse per la meta-analisi 2025
Italian Psychological Association (AIP), Experimental Psychology - Torino, Italy
- Brosche, K., **Gambarota, F., Altoè, G., Rugani, R.**
Effects of Domestication and Selection for Productivity on Numerical Cognition in Chicks 2024
European Conference on Behavioural Biology (ECBB) - Zurich, Switzerland
- Gambarota [P], F., Vesely, A., Finos, L., Altoè, G.**
Joinmeta - An Inferential approach to multiverse meta-analysis 🌐 2023
Society for the Improvement of Psychological Science (SIPS) - Padova, Italy
- Rasti, S., **Gambarota, F., Altoè, G.**
Multiverse Meta-Analysis: Proposing an Exploratory Framework 2023
Society for the Improvement of Psychological Science - Padova, Italy
- del Popolo Cristaldi, F., **Gambarota, F., Oosterwijk, S.**
Cross-modality effects in affective prediction construction: the role of past visual experience in subjective reactions to new affective pictures and sounds 2022
Annual Conference of the European Society for Cognitive and Affective Neuroscience (ESCAN) - Virtual

- Pezzetta, R., **Gambarota**, F., Tarantino, V., Devita, M., Cattaneo, Z., Arcara, G., Mapelli, D., Masina, F.
Probing cerebellar involvement in cognition through neuromodulation: A meta-analysis on the effectiveness of non-invasive cerebellar stimulation 2022
Transcranial Brain Stimulation in Cognitive Neuroscience Workshop - Rovereto, Italy
- Gambarota** [P], F., Zandonella Callegher, C., Linkersdörfer, J., Ling, M., Kothe, E.
trackdown - An R package for collaborative writing and editing   2021
Society for the Improvement of Psychological Science (SIPS) - Virtual
- Gambarota** [P], F., Zandonella Callegher, C., Linkersdörfer, J., Ling, M., Kothe, E.
trackdown - A simple framework for collaboration in a literate programming workflow   2021
useR - Virtual
- Gambarota** [P], F., Pastore, Luria, Ferrari, Sessa, P.
Visual Working Memory Precision for Emotional Faces in Moebius Patients  2020
Cognitive Science Arena - Bressanone, Italy
- Quettier, T., **Gambarota**, F., Sessa, P.
Look at others' smile: Sensorimotor modulation of visual awareness 2019
Italian Society of Psychophysiology and Cognitive Neuroscience (SIPF) - Ferrara, Italy

Symposia (1)

[P] means that I was the proponent [accepted] means that the symposium has been accepted but has not taken place yet.

- Gambarota** [P], F., Crepaldi, D., Calignano, G., Finos, L., Scandola, M.
The Multiverse of Multi-labs. Methodological and Statistical Aspects of Multi-Lab and Multiverse Studies  2024
Italian Psychological Association (AIP), Experimental Psychology - Noto, Italy

Peer Reviews

Ad hoc reviewer (8 reviewed papers) for:

- **International Journal of Psychology** (n = 2)
- **PLoS ONE** (n = 1)
- **Neuroscience of Consciousness** (n = 1)
- **Nature Communications** (n = 1)
- **Collabra: Psychology** (n = 1)
- **Psychology of Sport & Exercise** (n = 1)
- **Research Synthesis Methods** (n = 1)

Academic memberships

Italian Reproducibility Network	from: 2024 - ongoing (ITRN)
The Society for the Improvement of Psychological Science	from: 2023 - ongoing (SIPS)
Associazione Italiana di Psicologia, Sezione Sperimentale	from: 2022 - ongoing (AIP)
Associazione Italiana di Psicologia, Sezione Sviluppo	from: 2024 - ongoing (AIP)

Organization

- 3 R's of Trustworthy Science: Reproducibility, Replicability and Robustness** 2026
School of Psychology, University of Padova
 I was part of the organizing committee of the Summer School for PhD students "3 R's of Trustworthy Science"
<https://psicostat.github.io/3R-2026/>
- Cognitive Science Arena** 2025
Free University of Bozen-Bolzano
 Chair for the Methodology talks session
- Replicability Crisis in Science** 2025
School of Psychology, University of Padova

I was part of the organizing committee of the Summer School for PhD students “Replicability Crisis in Science”

Replicability Crisis in Science

2024

Department of Statistics, University of Padova

I was part of the organizing committee of the Summer School for PhD students “Replicability Crisis in Science”

Italian Association of Psychology (AIP)

2022

University of Padova

I was part of the organizing committee of the **XXX edition** of the Italian Association of Psychology (AIP) conference and editor of the Book of Abstract <https://www.padovauniversitypress.it/it/publications/9788869383168>

MRInference Winter School

2021

University of Padova

I was part of the organizing committee of the “MRInference: from data to knowledge” winter school organized by the University of Padova

Institutional Service

This section lists my institutional service activities within the University of Padova.

Member and Secretary of the Evaluation Committee (Commissione Valutatrice) for SEED (ex-SID) Research Projects 2026–2028.

2026

Department of Developmental Psychology and Socialization, University of Padova, Italy

Responsible for evaluating 11 research proposals and recommending projects for funding.

Member of the Prova Pratica Valutativa (PPV) Examining Committee

2025 - ongoing

University of Padova, Italy

- Commission of 07-08 October 2025

Member of the Scientific Committee (Commissione Scientifica)

2025 - ongoing

Department of Developmental Psychology and Socialization, University of Padova, Italy

Researcher's representative (four-year mandate; <https://www.dpss.unipd.it/content/dipartimento/commissioni>).

Third Mission

Section written in Italian

In questa sezione vengono riportate tutte le voci presenti sul database IRIS per le attività di Public Engagement e Formazione Continua. Sono attività dove risulterebbe come *Responsabile* o *Partecipante* come riportato dal database IRIS. *Partecipante* viene inteso come parte del gruppo organizzatore.

Public Engagement

Replicability Crisis in Science – Methodological Seminars

2025

University of Padova

Seminario metodologico sulla crisi di replicabilità nella ricerca scientifica, con i relatori internazionali Giovanni Parmigiani (Harvard University) e Branden Fitelson (Northeastern University), rivolto a ricercatori, dottorandi e cittadinanza per promuovere la comprensione critica dei metodi scientifici. [Iris ID: PEN-11758]

Responsabile/i: Aliverti, E., Altœ', G., Calderan, M., **Gambarota**, F., Scarpa, B. · **Ruolo:** Responsabile

Replicabilità e riproducibilità. Buone pratiche per la scienza aperta

2025

University of Padova

Ho tenuto un webinar dedicato ai principi e alle buone pratiche dell'Open Science, con particolare attenzione alla replicabilità, alla riproducibilità e alla trasparenza dei processi di ricerca scientifica. [Iris ID: PEN-11479]



Responsabile/i: Zorzi M., Andreoli, L. · **Ruolo:** Partecipante

Science4all

2024 - 2025

University of Padova

Attività di divulgazione scientifica rivolta ad adulti e bambini, attraverso giochi interattivi per esplorare i concetti di probabilità e incertezza nel comportamento umano e le potenzialità e i limiti della misurazione psicologica.

Responsabile/i: Pastore, M. · **Ruolo:** Partecipante

- 2025 — IRIS ID: PEN-10281
- 2024 — IRIS ID: PEN-5981

Sito web <https://psicostat.dpss.psy.unipd.it/> del gruppo di ricerca multidisciplinare “Psicostat”. 2023 - ongoing

Online

Divulgazione scientifica attraverso il sito web Psicostat, con incontri seminariali aperti al pubblico su metodi statistici applicati alla psicologia, condivisione di materiali e registrazioni ad accesso libero e una comunità internazionale di circa 300 membri. [Iris ID: PEN-3397] 

Responsabile/i: Altoè, G. · **Ruolo:** Partecipante

Sostenibilità umana: superare la società della performance e immaginare nuovi modelli - by TLON 2023
Padova

Workshop interattivo sulle tematiche della società della performance, rivolto al personale del DPSS, con una sessione teorica aperta alla cittadinanza tramite diretta streaming e una sessione pratica riservata al personale del dipartimento. [Iris ID: PEN-2435]

Responsabile/i: Roch, M. · **Ruolo:** Partecipante

Formazione continua

International Winter School 2025: The 4 Ms

2025

University of Padova

Scuola internazionale di formazione avanzata rivolta a giovani ricercatori, dedicata a meta-ricerca, misurazione psicometrica, studi multi-laboratorio e analisi multiverso nelle scienze comportamentali, attraverso lezioni, workshop e attività pratiche con esperti internazionali. [Iris ID: FCO-0781]

Responsabile/i: Altoè, G., Toffalini, E. · **Ruolo:** Partecipante

Replicability Crisis in Science

2025

University of Padova

Scuola estiva dedicata alla crisi di replicabilità nella ricerca scientifica, rivolta principalmente a dottorandi e aperta anche a studenti magistrali e ricercatori post-dottorato, con possibilità di riconoscimento di 3 CFU. [Iris ID: FCO-0788]

Responsabile/i: Aliverti, E. · **Ruolo:** Partecipante

Research groups membership

Psicostat - psicostat.dpss.psy.unipd.it

2019 - ongoing

I am part of the **core team** of Psicostat founded by professors Massimiliano Pastore, Gianmarco Altoè and Livio Finos. We are an interdisciplinary research group working in areas related to quantitative psychology, psychometrics, psychological testing and statistics.

Colab colab.psy.unipd.it

2019 - ongoing

The CoLab, established at the Department of Developmental Psychology of the University of Padova in 2000, hosts a variety of research projects, which focus primarily on exploring the functional and neural mechanisms subserving attention and language abilities in human adults.

Media Coverage

Interview to Prof. Giovanni Parmigiani

2025

I interviewed Prof. Giovanni Parmigiani from Harvard University for an event organized by the PhD program in Psychological Sciences, University of Padova 

Psicostat: Un laboratorio aperto tra dati, idee e cultura della ricerca

2025

Article about the Psicostat research group from the Italian Psychological Association (AIP) 

Meta-analysis about Death Anxiety

2025

Article about the meta-analysis Dumitru, E. P., Cardoso, R. A. I., Milea, I., **Gambarota F.**, Altoè, G., David, D. O., & Cristea, I. A. (2025). A meta-analysis of the association of death anxiety with psychological distress and psychopathology. *Nature Human Behaviour*, 1–11. <https://doi.org/10.1038/s41562-025-02115-7> 



Collaborations

A selection of collaborations with scholars outside the School of Psychology (University of Padova)

Marco del Giudice

2026 - ongoing

University of Trieste

Research project about improving umbrella reviews methodology

Daniël Lakens

2024 - ongoing

Eindhoven University of Technology

Improving the reporting of results from psychological studies

Giovanni Parmigiani

2024 - ongoing

Harvard University

Research and teaching projects about replicability in Psychology and Biomedical sciences

Branden Fitelson

2024 - ongoing

Northeastern University

Research and teaching projects about replicability in Psychology and Biomedical sciences

Livio Finos

2023 - ongoing

Department of Statistics, University of Padova

Research projects about inference in multiverse meta-analysis and R packages development

Roy Luria

2021 - ongoing

Tel Aviv University

Research projects about consciousness and working memory

Naotsugu Tsuchiya

2020 - ongoing

Monash University

Research projects about visual consciousness

Involvement in research groups

Research group on Multiverse analysis in generalized linear models and meta-analysis

2023 - ongoing

Member of a national research group about inference in multiverse for GLM and meta-analysis with Gianmarco Altoè (University of Padova), Anna Vesely (University of Bologna) and Livio Finos (University of Padova), Massimiliano Pastore (University of Padova), Paolo Girardi (Ca' Foscari University of Venice). The research group produced the following conference presentations and posters:

- **Gambarota**, F., Vesely, A., Finos, L., Altoè, G. (2024). *Inference on multiverse meta-analysis*. META-REP. Munich, Germany.
- Girardi, P., Vesely, A., **Gambarota**, F., Altoè, G., Pastore, M., Finos, L. (2024). *Exploring the Dark Side of the Multiverse: Pitfalls and Possibilities in Applications*. Association for Applied Statistics (ASA). Rome, Italy.
- **Gambarota**, F. (2024). *Inferenza nella meta-analisi multiverse. Un approccio multivariato basato sulle permutazioni*. La Psicometria tra Oggi e Domani: Sfide E Nuovi Orizzonti. Firenze, Italy.
- **Gambarota**, F., Vesely, A., Finos, L., Altoè, G. (2023). *Joinmeta - An Inferential approach to multiverse meta-analysis*. Society for the Improvement of Psychological Science (SIPS). Padova, Italy.

Research group working on tutorials about statistical methods in Psychology

2023 - ongoing

Member of a national research group with the aim of writing tutorial papers for common and widely used statistical methods in Psychology. Main group members are Gianmarco Altoè (University of Padova), Enrico Toffalini (University of Padova) and other members from the Psicostat research group. We produced the following papers:

- **Gambarota** F., & Altoè, G. (2024). Ordinal regression models made easy: A tutorial on parameter interpretation, data simulation and power analysis. *International Journal of Psychology: Journal International de Psychologie*, 59, 1263–1292. <https://doi.org/10.1002/ijop.13243>

- **Gambarota F., & Altoè, G. (2024).** Understanding meta-analysis through data simulation with applications to power analysis. *Advances in Methods and Practices in Psychological Science*, 7. <https://doi.org/10.1177/25152459231209330>
- Toffalini, E., **Gambarota F.**, Perugini, A., Girardi, P., Tobia, V., Altoè, G., Giofrè, D., Psicostat Core Team, & Feraco, T. (2024). Clusters that are not there: An R tutorial and a Shiny app to quantify a priori inferential risks when using clustering methods. *International Journal of Psychology*. <https://doi.org/10.1002/ijop.13246>

Research group on visual consciousness and visual working memory

2019 - ongoing

Member of an international research group about visual consciousness for emotions and the relationship between visual working memory and consciousness. The principal investigators are Paola Sessa (University of Padova) and Naotsugu Tsuchiya (Monash University, Australia; **tLab** research group). Other members of the research group are: Antonio Maffei (University of Padova), Roy Luria (University of Tel Aviv, Israel), Roberto Dell'Acqua (University of Padova), Thomas Quettier (University of Bologna). The collaboration produced the following publications:

- Maffei, A., **Gambarota F.**, Liotti, M., Dell'Acqua, R., Tsuchiya, N., & Sessa, P. (2024). Conscious perception of fear in faces: Insights from high-density EEG and perceptual awareness scale with threshold stimuli. *Cortex*, 174, 93–109. <https://doi.org/10.1016/j.cortex.2024.02.010>
- Quettier, T., Maffei, A., **Gambarota F.**, Ferrari, P. F., & Sessa, P. (2023). Testing EEG functional connectivity between sensorimotor and face processing visual regions in individuals with congenital facial palsy. *Frontiers in Systems Neuroscience*, 17, 1123221. <https://doi.org/10.3389/fnsys.2023.1123221>
- **Gambarota F.**, Tsuchiya, N., Pastore, M., Di Polito, N., & Sessa, P. (2022). Unconscious Visual Working Memory: A critical review and Bayesian meta-analysis. *Neuroscience and Biobehavioral Reviews*, 136, 104618. <https://doi.org/10.1016/j.neubiorev.2022.104618>

Software

Most of my research projects are accompanied by an R package, Shiny application or R code. The code and unpublished packages can be found on GitHub:

- **filippogambarota**: main personal repository
- **shared-research**: collection of papers with code and/or packages
- **stat-teaching**: collection of teaching materials
- **psicostat**: repository of the Psicostat research group

R Packages

CRAN

- **trackdown** (<https://github.com/ClaudioZandonella/trackdown>): R package for collaborative writing and editing of R Markdown (or Sweave) documents in Google Docs
Role: Author
- **flipscores** (<https://github.com/livioivil/flipscores>): R package for Robust Score Testing in GLMs, by Sign-Flip Contributions
Role: Contributor

GitHub

- **criticalESvalue** (<https://github.com/psicostat/criticalESvalue>): R package to calculate critical effect sizes of common statistical models Perugini, A., **Gambarota F.**, Toffalini, E., Lakens, D., Pastore, M., Finos, L., Core Team Psicostat, & Altoè, G. (2025). The benefits of reporting critical-effect-size values. *Advances in Methods and Practices in Psychological Science*, 8. <https://doi.org/10.1177/25152459251335298>
Role: Author & Maintainer
- **clustersimulation** (<https://github.com/psicostat/clustersimulation>): R package and Shiny App to evaluate inferential errors in cluster analysis Toffalini, E., **Gambarota F.**, Perugini, A., Girardi, P., Tobia, V., Altoè, G., Giofrè, D., Psicostat Core Team, & Feraco, T. (2024). Clusters that are not there: An R tutorial and a Shiny app to quantify a priori inferential risks when using clustering methods. *International Journal of Psychology*. <https://doi.org/10.1002/ijop.13246>
Role: Author
- **pima** (<https://github.com/livioivil/pima>): R package implementing the Post Selection Inference in Multivariate Analysis Girardi, P., Vesely, A., Lakens, D., Altoè, G., Pastore, M., Calcagni, A., & Finos, L. (2024).

Post-selection inference in multiverse analysis (PIMA): An inferential framework based on the sign flipping score test. *Psychometrika*, 89, 542–568. <https://doi.org/10.1007/s11336-024-09973-6>

Role: Author & Maintainer

- **flipmeta** (<https://github.com/filippogambarota/flipmeta>): R package to perform sign-flipping inference on random-effects meta-analyses Manente, M., Finos, L., Altoè, G., & **Gambarota F.** (2026). Post-selection inference in Multiverse Meta-analysis: The PIMMA framework. *PsyArXiv*. https://doi.org/10.31234/osf.io/8ejsn_v1

Role: Author & Maintainer

- **ordinalsim** (<https://shared-research.github.io/ordinalsim/>): R package to simulate location-scale ordinal regression models **Gambarota F.**, & Altoè, G. (2024). Ordinal regression models made easy: A tutorial on parameter interpretation, data simulation and power analysis. *International Journal of Psychology: Journal International de Psychologie*, 59, 1263–1292. <https://doi.org/10.1002/ijop.13243>

Role: Author & Maintainer

Languages

- **Italian** : *mother tongue*
- **English** /: *proficient*

Research Skills

Rated as  (basic knowledge) to  (advanced knowledge).

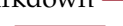
OS

- Linux 
- Windows 
- macOS 

Programming languages

- R 
- MATLAB 
- Python 
- JavaScript 

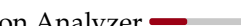
Writing

- LaTeX 
- HTML 
- CSS 
- Pandoc 
- (R)Markdown 
- Quarto 

Experiments

- PsychoPy 
- E-Prime 
- Presentation 
- Psychtoolbox 

EEG/ERP

- EEGLAB 
- ERPLAB 
- Brainstorm 
- BrainVision Analyzer 

[ITA] Autorizzo il trattamento dei dati personali presenti nel CV ai sensi del D.Lgs. 2018/101 e del GDPR (Regolamento UE 2016/679).

Il sottoscritto Filippo Gambarota, consapevole delle responsabilità anche penali nel caso di falsità in atti e dichiarazioni mendaci ai sensi dell'art. 76 del DPR 445/2000, dichiara che i dati, le informazioni e le notizie riportate nel presente Curriculum Vitae corrispondono al vero.

[ENG] I authorize the processing of personal data included in my CV in accordance with Legislative Decree 2018/101 and the GDPR (Regulation EU 2016/679).

I hereby declare that the information and details provided in this Curriculum Vitae are true and accurate to the best of my knowledge, acknowledging the legal and criminal consequences of providing false statements as per Article 76 of Presidential Decree 445/2000.

16 October 2026

Filippo Gambarota

Filippo Gambarota