

# Filippo Gambarota



✉ [filippo.gambarota@unipd.it](mailto:filippo.gambarota@unipd.it) | 🌐 [filippogambarota](https://www.filippogambarota.com) | 📞 0000-0002-6666-1747 | 🐦 [fgambarota](https://twitter.com/fgambarota)

*Last Update: June 10, 2024*

I am a **postdoctoral researcher** at the University of Padova, department of Developmental Psychology and Socialization (DPSS) and **licensed psychologist**. I am interested in meta-analysis, Monte Carlo simulations for power and design analysis and multiverse analysis.

## CURRENT POSITION

---

**Post-doctoral researcher (2 year research grant - type B)** 2024 - ongoing  
*Department of Developmental Psychology and Socialization, University of Padova, Italy*  
**Project:** Multiverse meta-analysis (M-PSI/03)  
**Supervisor:** Prof. Gianmarco Altoè

## ACADEMIC ROLES

---

**Expert (Cultore della Materia) of Psychometrics (M-PSI/03)** 2023 - ongoing  
*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 (M-PSI/03) Supervisor: Prof. Gianmarco Altoè

## EDUCATION

---

**PhD in Psychological Sciences** 2019 - 2023  
*University of Padova, Italy*  
**Project:** The relationship between visual working memory and consciousness.  
**Supervisor:** Professor Paola Sessa,  
**Co-supervisor:** Professor Massimiliano Pastore

**Visiting PhD student** 2021  
*University of Tel-Aviv, Israel*  
Research project about the relationship between Working Memory and Consciousness  
**Supervisor:** Professor Roy Luria

**Licensed Psychologist (Esame di Stato)** 2020  
*University of Padova, Italy*

## Internship

2018 - 2019

*Department of Developmental Psychology and Socialization - University of Padova*

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

*University of Padova, Italy*

Thesis: Visual Working Memory representations of infant faces during pregnancy as an adaptive mechanism. An EEG study.

**Supervisor:** Professor Paola Sessa

## Internship

2018

*Department of Developmental Psychology and Socialization - University of Padova*

Research project about social cognition during pregnancy with EEG data collection

## B.S. in Psychology - 110 cum laude

2016

*University of Padova, Italy*

Thesis: Psychosocial well-being of adolescents with oncoemathological disease.

**Supervisor:** Professor Ughetta Moscardino

## Internship

2016

*Hospital of Padova - Pediatrics Oncology*

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

## AWARDS

---

### Reproducibility Award - Italian Reproducibility Network (ITRN)

2024

The paper "*Understanding meta-analysis through data simulation with applications to power analysis*" won the 2023 Reproducibility Award from the Italian Reproducibility Network (ITRN)

DOI [10.5281/zenodo.10277050](https://doi.org/10.5281/zenodo.10277050)

### 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/>)

## TRAINING

---

### Meta-Analysis with Metafor

2021

*Maastricht University*

Intensive course about meta-analysis with the [metafor](#) package held by Professor Wolfgang Viechtbauer

### Bayesian Regression Modeling with BRMS

2020

*Potsdam University*

Summer School in Bayesian Statistics for Cognitive Psychology

### Bayesian Statistical Analyses for the Human, Social and Cognitive Sciences

2019

*University of Verona*

## TEACHING

---

### > PHD

These courses are part of the PhD program in Psychological Sciences at the University of Padova.

## **Generalized Linear Models - PhD Course in Psychological Sciences (15 hrs.)**

2023

*University of Padova*

I held the Generalized Linear Models course (Part A and B) within the PhD program in Psychological Sciences, University of Padova

### **> LECTURES ON CONTRACT (DOCENZE A CONTRATTO)**

#### **Statistical Methods and Data Analysis in Developmental Psychology [M-PSI/03] (21 hrs., 3 CFU)**

2023

*University of Padova*

Lecturer (titolare di modulo) for the Master's degree in Developmental and Educational Psychology, University of Padova [[Materials](#)]

### **> SEMINARS**

#### **Introduction to R**

2021 - ongoing

*University of Padova*

Intensive course about programming in R as part of the [ARCA](#) courses, Department of Developmental Psychology and Socialization, University of Padova [[Materials](#)]

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

### **> INTEGRATIVE TEACHING (DIDATTICA INTEGRATIVA)**

#### **Data Analysis in Developmental Psychology [M-PSI/03]**

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 [M-PSI/03] (14 hrs.)**

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 [M-PSI/01] (2 hrs.)**

2021

*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 [[Materials](#)]

#### **Visual Working Memory in Social Cognition [M-PSI/01] (2 hrs.)**

2021

*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 [[Materials](#)]

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 [[Materials](#)]

## SUPERVISION

---

- I have co-supervised **7 Master's degree** dissertations and **2 Bachelor's degree** dissertations (Department of Developmental Psychology and Socialization, University of Padova, Italy).
- 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

---

Journal impact factors and quartiles are taken from **Journal Citation Reports** considering the last available data

I published 12 papers on journals with an average impact factor of 6.275. In terms of quartiles, I published 10 papers in Q1 journals, 1 papers in Q2 journals, 1 papers in Q3 journals.

### Google Scholar

- H-index: **5**
- Citations: **89**

### Scopus

- H-index: **4**
- Citations: **36**

### > PUBLISHED (12)

Del Popolo Cristaldi, F., G. Buodo, F. **Gambarota**, S. Oosterwijk, and G. Mento (2024). "How previous experience shapes future affective subjective ratings: A follow-up study investigating implicit learning and cue ambiguity". En. In: *PLoS One* 19.2, p. e0297954. [IF: 3.7, Quartile: Q1]

Di Rosa, E., F. Masina, A. Pastorino, E. Galletti, F. **Gambarota**, G. Altoè, N. Edelstyn, and D. Mapelli (2024). "Mood moderates the effects of prefrontal tDCS on executive functions: A meta-analysis testing the affective state-dependency hypothesis". En. In: *J. Affect. Disord.* 351, pp. 920-930. ISSN: 0165-0327, 1573-2517. DOI: 10.1016/j.jad.2024.02.009. [IF: 6.6, Quartile: Q1]

**Gambarota**, F. and G. Altoè (2024). "Understanding meta-analysis through data simulation with applications to power analysis". En. In: *Adv. Methods Pract. Psychol. Sci.* 7.1. ISSN: 2515-2459, 2515-2467. DOI: 10.1177/25152459231209330. [IF: 13.6, Quartile: Q1]

Maffei, A., F. **Gambarota**, M. Liotti, R. Dell'Acqua, N. Tsuchiya, and P. Sessa (2024). "Conscious perception of fear in faces: Insights from high-density EEG and Perceptual Awareness Scale with threshold stimuli". In: *Cortex*. ISSN: 0010-9452, 1973-8102. DOI: 10.1016/j.cortex.2024.02.010. [IF: 3.6, Quartile: Q1]

Del Popolo Cristaldi, F., F. **Gambarota**, and S. Oosterwijk (2023). "Does your past define you? The role of previous visual experience in subjective reactions to new affective pictures and sounds". En. In: *Emotion* 23.5, pp. 1317-1333. ISSN: 1528-3542, 1931-1516. DOI: 10.1037/emo0001168. [IF: 4.2, Quartile: Q1]

Montuori, C., F. **Gambarota**, G. Altoé, and B. Arfé (2023). "The cognitive effects of computational thinking: A systematic review and meta-analytic study". En. In: *Comput. Educ.* 210.104961, p. 104961.

Pezzetta, R., F. **Gambarota**, V. Tarantino, M. Devita, Z. Cattaneo, G. Arcara, D. Mapelli, and F. Masina (2023). "A meta-analysis of non-invasive brain stimulation (NIBS) effects on cerebellar-associated cognitive processes". En. In: *Neurosci. Biobehav. Rev.* 157.105509, p. 105509. ISSN: 0149-7634, 1873-7528. DOI: 10.1016/j.neubiorev.2023.105509. [IF: 8.2, Quartile: Q1]

Quettier, T., A. Maffei, F. **Gambarota**, P. F. Ferrari, and P. Sessa (2023). "Testing EEG functional connectivity between sensorimotor and face processing visual regions in individuals with congenital facial palsy". En. In: *Front. Syst. Neurosci.* 17, p. 1123221. ISSN: 1662-5137. DOI: 10.3389/fnsys.2023.1123221. [IF: 3, Quartile: Q3]

**Gambarota**, F., N. Tsuchiya, M. Pastore, N. Di Polito, and P. Sessa (2022). "Unconscious Visual Working Memory: A critical review and Bayesian meta-analysis". En. In: *Neurosci. Biobehav. Rev.* 136.104618, p. 104618. ISSN: 0149-7634, 1873-7528. DOI: 10.1016/j.neubiorev.2022.104618. [IF: 8.2, Quartile: Q1]

Verroca, A., C. M. de Rienzo, F. **Gambarota**, and P. Sessa (2022). "Mapping the perception-space of facial expressions in the era of face masks". En. In: *Front. Psychol.* 13, p. 956832. ISSN: 1664-1078. DOI: 10.3389/fpsyg.2022.956832. [IF: 3.8, Quartile: Q1]

Quettier, T., F. **Gambarota**, N. Tsuchiya, and P. Sessa (2021). "Blocking facial mimicry during binocular rivalry modulates visual awareness of faces with a neutral expression". En. In: *Sci. Rep.* 11.1, p. 9972. ISSN: 2045-2322. DOI: 10.1038/s41598-021-89355-5. [IF: 4.6, Quartile: Q2]

**Gambarota**, F. and P. Sessa (2019). "Visual working memory for faces and facial expressions as a useful ``tool'' for understanding social and affective cognition". En. In: *Front. Psychol.* 10.OCT, p. 2392. ISSN: 1664-1078. DOI: 10.3389/fpsyg.2019.02392. [IF: 3.8, Quartile: Q1]

## > ACCEPTED (1)

Grassi, Altoè, Brattico, [...] **Gambarota**, [...] Zentner - Do musicians have better short-term memory than nonmusicians? A multi-lab study - *Advances in Methods and Practices in Psychological Science* [Registered Replication Report - Provisional Acceptance]

## > UNDER REVIEW (1)

**Gambarota** & Altoè - Ordinal regression models made easy. A tutorial on parameter interpretation, data simulation, and power analysis [[Preprint](#)]

## CONFERENCES

---

### > INVITED TALKS (1)

**Gambarota** [P] & Altoè 2024  
**Understanding meta-analysis through data simulation with applications to power analysis -**  
**[[Material](#)]**  
*Cognitive Science Arena (CSA) - Bressanone, Italy*

### > TALKS (9)

[P] means that I was the presenting author

[accepted] means that the talk has been accepted but not delivered yet

Girardi, Vesely, **Gambarota**, Altoè, Pastore, Finos 2024  
**Exploring the Dark Side of the Multiverse: Pitfalls and Possibilities in Applications**  
**[accepted]**

- Gambarota [P]** 2024  
**Inferenza nella meta-analisi multiverse. Un approccio multivariato basato sulle permutazioni [accepted]**  
*La Psicometria tra Oggi e Domani: Sfide E Nuovi Orizzonti - Firenze, Italy*
- Gambarota [P]** 2024  
**Cosa accade al di fuori della consapevolezza visiva? [Italian] - [Slides]**  
*Brain Awareness Week - Padova, Italy*
- Gambarota [P], Luria and Sessa** 2022  
**Conscious and unconscious information processing in visual working memory - [Slides]**  
*Italian Psychological Association (AIP) - Padova, Italy*
- del Popolo Cristaldi, **Gambarota** and Oosterwijk 2022  
**The role of past experience in subjective ratings to affective predictions: cross-modality effects**  
*Cognitive Science Arena (CSA) - Bressanone, Italy*
- del Popolo Cristaldi, **Gambarota** and Oosterwijk 2022  
**The role of past visual experience in subjective reactions to new affective pictures and sounds**  
*Annual Conference of the Society for Affective Science (SAS) - Virtual*
- Gambarota [P], Tsuchiya, Pastore, Di Polito and Sessa** 2021  
**Meta-analysis in Consciousness Research**  
*Conscious Brain Concepts Workshop - University of Oslo - Virtual*
- del Popolo Cristaldi, **Gambarota** and Oosterwijk 2021  
**The role of previous probabilistic learning on the subjective affective experience**  
*Italian Psychological Association (AIP) - Lecce, Italy*
- Gambarota [P], Zandonella Callegher, Linkersdörfer, Ling and Kothe** 2021  
**trackdown - Collaborative writing through literate programming in R - [Slides]**  
*Towards Advanced Scientific Knowledge (TASK4) - Virtual*
- > POSTERS (7)**  
[P] means that I was the presenting authors
- Gambarota [P], Vesely, Finos, Altoè** 2023  
**Joinmeta - An Inferential approach to multiverse meta-analysis - [Poster]**  
*Society for the Improvement of Psychological Science (SIPS) - Padova, Italy*
- del Popolo Cristaldi, **Gambarota** and Oosterwijk 2022  
**Cross-modality effects in affective prediction construction: the role of past visual experience in subjective reactions to new affective pictures and sounds**  
*Annual Conference of the European Society for Cognitive and Affective Neuroscience (ESCAN) - Virtual*
- Pezzetta, **Gambarota**, Tarantino, Devita, Cattaneo, Arcara, Mapelli and Masina 2022  
**Probing cerebellar involvement in cognition through neuromodulation: A meta-analysis on the effectiveness of non-invasive cerebellar stimulation**

- Gambarota** [P], Zandonella Callegher, Linkersdörfer, Ling and Kothe 2021  
**trackdown - An R package for collaborative writing and editing** - [[Video](#)], [[Slides](#)]  
*Society for the Improvement of Psychological Science (SIPS) - Virtual*
- Gambarota** [P], Zandonella Callegher, Linkersdörfer, Ling and Kothe 2021  
**trackdown - A simple framework for collaboration in a literate programming workflow** - [[Video](#)], [[Slides](#)]  
*useR - Virtual*
- Gambarota** [P], Pastore, Luria, Ferrari and Sessa 2020  
**Visual Working Memory Precision for Emotional Faces in Moebius Patients**  
*Cognitive Science Arena - Bressanone, Italy*
- Quettier, **Gambarota** and Sessa 2019  
**Look at others' smile: Sensorimotor modulation of visual awareness**  
*Italian Society of Psychophysiology and Cognitive Neuroscience (SIPF) - Ferrara, Italy*

## PEER REVIEWS

---

See my [Publons Profile](#)

Ad-hoc reviewer for:

- International Journal of Psychology
- PLoS ONE
- Consciousness and Cognition

## PROFESSIONAL MEMBERSHIPS

---

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

## ORGANIZATION

---

- 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

## THIRD MISSION (TERZA MISSIONE)

---

Online

Il sito <https://psicostat.dpss.psy.unipd.it/> raccoglie e condivide in modo open le attività del gruppo a favore degli utenti interessati [Iris ID: PEN-3397]

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

2023

Padova

Sensibilizzazione di tutto il personale del DPSS relativamente alle tematiche sulla società performante. Si è trattato di un workshop interattivo all'interno del retreat del dipartimento. La parte teorica è stata aperta alla cittadinanza attraverso la diretta fb, mentre la parte pratica è stata rivolta solo al personale dpss [Iris ID: PEN-2435]

## RESEARCH GROUPS

---

**Psicostat - [psicostat.dpss.psy.unipd.it](https://psicostat.dpss.psy.unipd.it)**

2019 - ongoing

We are an interdisciplinary research group working in areas related to quantitative psychology, psychometrics, psychological testing and statistics.

**Colab [colab.psy.unipd.it](https://colab.psy.unipd.it)**

2019 - ongoing

The CoLab, established at the Department of Developmental Psychology of the University of Padova in the 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.

## 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 ●●●●○
- Eprime ●●●○○
- Presentation ●●●●○
- Psychtoolbox ●●●○○

> EEG/ERP

- EEGLab ●●●○○
- ERPLab ●●●○○
- Brainstorm ●○○○○
- Brainvision Analyzer ●●○○○



*Filippo Gambarota*