Filippo Gambarota



Ilippo.gambarota@unipd.it | ♠ filippogambarota | ♠ 0000-0002-6666-1747 | ▶ 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

I won Reproducibility Award from the Italian Reproducibility Network (ITRN) for the paper (Gambarota & Altoè, 2024) DOI 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

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

> PHD

Replicability crisis in science? [planned] (5 hrs.)

2024

University of Padova

Specialist Course for the XXXIX Cycle of the PhD course in Statistics, Department of Statistical Sciences, University of Padova

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. Massimilano 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]

Neural Correlates of Consciousness [M-PSI/01] (2 hrs.)

2020 - 2023

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: 5Citations: 89

Scopus

H-index: 4Citations: 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. ISSN: 0360-1315, 1873-782X. DOI: 10.1016/j.compedu.2023.104961. [IF: 12, Quartile: Q1]

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] and Altoè

2024

Understanding meta-analysis through data simulation with applications to power analysis - [Material] Cognitive Science Arena (CSA) - Bressanone, Italy

> TALKS (11)

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

Gambarota [P], Toffalini

2024

Are most interactions false? The importance of the appropriate distribution and link function with non-normal data. [accepted]

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

Perugini, **Gambarota**, Toffalini, Sita, Lakens, Pastore, Finos, Psicostat, Altoè

2024

Critical effect size values and why to report them. [accepted]

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

Girardi, Vesely, **Gambarota**, Altoè, Pastore, Finos

2024

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

Association for Applied Statistics (ASA) - Rome, Italy

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 The role of previous probabilistic learning on the subjective affective experience	2021
Italian Psychological Association (AIP) - Lecce, Italy	
Gambarota [P], Zandonella Callegher, Linkersdörfer, Ling and Kothe trackdown - Collaborative writing through literate programming in R - [Slides] Towards Advanced Scientific Knowledge (TASK4) - Virtual	2021
> POSTERS (7)	
[P] means that I was the presenting authors	
Gambarota [P], Vesely, Finos, Altoè Joinmeta - An Inferential approach to multiverse meta-analysis - [Poster] Society for the Improvement of Psychological Science (SIPS) - Padova, Italy	2023
del Popolo Cristaldi, Gambarota and Oosterwijk 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, 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	
Transcranical Brain Stimulation in Cognitive Neuroscience Workshop - Rovereto, Italy	
Gambarota [P], Zandonella Callegher, Linkersdörfer, Ling and Kothe trackdown - An R package for collaborative writing and editing - [Video], [Slides]	2021

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

> SYMPOSIA (1)

[P] means that I was the proponent

[accepted] means that symposium has been accepted but has not taken place yet.

Gambarota [P], Crepaldi, Liuzza, Calignano, Finos, Scandola

2024

The Multiverse of Multi-labs. Methodological and Statistical Aspects of Multi-Lab and Multiverse Studies. [accepted]

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

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)

Sito web https://psicostat.dpss.psy.unipd.it/ del gruppo di ricerca multidisciplinare "Psicostat".

2023 - ongoing

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 i 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

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

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 ••••

REFERENCES

Filippo Gambarota

Gambarota, F., & Altoè, 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