

MARCO BIELLA

Researcher in Cognitive Sciences / Data Scientist

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EXPERIENCE

Postdoc Researcher

Behavioral Marketing

University of Basel

February 2023 – Today

Lecturer in Psychometrics

Psychometrics

University of Bergamo

November 2024 – October 2025

Postdoc Researcher

Mobile App-based Attitude Change

Catholic University of the Sacred Heart – Milan

June 2022 – December 2022

Postdoc Researcher

Cognitive Research in Social Psychology

Heidelberg University (Prof. Klaus Fiedler)

October 2021 – September 2022

Postdoc Researcher

Machine Learning in Psychometrics, Neuroscience, and Neuroeconomics

University of Pisa

March 2021 – August 2021

Postdoc Researcher

Social Cognition and Decision Sciences

University of Tuebingen

March 2019 – February 2021

Data Scientist

Machine Learning and Predictive Analytics

Fault Detection for Banking Mobile Apps

October 2018 – December 2018

Visiting Ph.D. Student

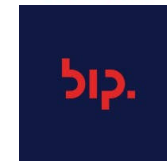
Social Cognition Center Cologne

University of Cologne

November 2017 – March 2018



UNIVERSITÀ DI PISA



Ph.D. Student

Department of Psychology

University of Milano - Bicocca

November 2015 – October 2018 (former Lab Manager, March 2014 – February 2015)

Online Media Intern

Yahoo! Italia, Editorial Team & Online Communication

August 2011 – March 2012



EDUCATION

University of Milano - Bicocca

Ph.D. in Psychology, Linguistics, and Cognitive Neurosciences, *with honors*

2015 – 2018

M.Sc. Social Psychology and Economic Behavior, *cum laude*

2012 – 2015

B.A. Psychology of Communication

2007 – 2011

Scientific Production

Publications

- Biella, M., & Batzdorfer, V.** (2026). Editorial: The phenomenon of misinformation in different domains and by various disciplines. *Frontiers in Psychology*. 16:1763023.
<https://doi.org/10.3389/fpsyg.2025.1763023>
- Biella, M., & Hütter, M.** (2026). Navigating the Social Environment: A Sampling Approach to Trustworthiness. *Personality and Social Psychology Bulletin*.
<https://doi.org/10.1177/01461672241273237>
- Biella, M., Gemignani, A., Conversano, C., Miniati, M., & Orrù, G.** (2025). Psychometric Assessment of the Italian Version of the Vaccination Attitudes Examination (VAX) Scale and Exploration of its Link with Policy Endorsement. *Collabra: Psychology*. <https://doi.org/10.1525/collabra.136895>
- Biella, M., Hennig, M., & Oswald, L.** (2025). Investigating the Social Boundaries of Fairness by Modeling Ultimatum Game Responders' Decisions with Multinomial Processing Tree Models. *Games*, 16(1), 2 <https://doi.org/10.3390/g16010002>.
- Anzani, A., **Biella, M.**, Prunas, A., Baldissarri, C., & Spaccatini, F. (2025). The call of the wolfpack. How social attraction toward the harasser complements ambivalent sexism in inducing empathic failure with the victim of stranger harassment. *Sexuality & Culture*. 1-21.
<https://doi.org/10.1007/s12119-025-10371-y>
- Rebholz, T., **Biella, M.**, & Hütter, M. (2024). Mixed-Effects Regression Weights for Advice Taking and Related Phenomena of Information Sampling and Utilization. *Journal of Behavioral Decision Making*. 37(2), <https://doi.org/10.1002/bdm.2369>
- Pavanello Decaro, S., Pessina, R., **Biella, M.**, & Prunas, A. (2024). Italian women who have sex with women: prevalence and co-occurrence of sexual practices. *Sexual Medicine*. 12(2), <https://doi.org/10.1093/sexmed/qfae017>
- Biella, M.**, Rebholz, T., Holthausen, M., & Hütter, M. (2023). The Interaction Game: Development and Validation of an Experimental Paradigm for Manipulating Social Distance. *Journal of Applied Social Psychology*. 53(8), <https://doi.org/10.1111/jasp.12969>
- Biella, M.**, Orrù, G., Ciacchini, R., Conversano, C., Marazziti, D., & Gemignani A. (2023). Anti-vaccination attitude and vaccination intentions against COVID-19: a retrospective cross-sectional study investigating the role of media consumption. *Clinical Neuropsychiatry*, 20(4).
<https://doi.org/10.36131/cnfioritieditore20230404>
- Catellani, P., **Biella, M.**, Carfora, V., Nardone, A., Brischigiario, L., Manera, M.R. & Piastra, M. (2023). A theory-based and data-driven approach to promoting physical activity through message-based interventions. *Frontiers in Psychology*. 14, <https://doi.org/10.3389/fpsyg.2023.1200304>

- Frisancho, A., **Biella, M.**, Brambilla, M., & Kret, M. E. (2023). All that meets the eye: The contribution of reward processing and pupil mimicry on pupillary reactions to facial trustworthiness. *Current Psychology*, 42, <https://doi.org/10.1007/s12144-021-02486-w>
- Carfora, V., **Biella, M.**, & Catellani, P. (2022). Affective Components in Promoting Physical Activity: A Randomized Controlled Trial of Message Framing. *Frontiers in Psychology*, 13, <https://doi.org/10.3389/fpsyg.2022.968109>
- Anzani, A., **Biella, M.**, Scandurra, C., & Prunas, A. (2022). Desire for Genital Surgery in Trans Masculine Individuals: The Role of Internalized Transphobia, Transnormativity and Trans Positive Identity. *International Journal of Environmental Research and Public Health*, 19(15), <https://doi.org/10.3390/ijerph19158916>
- Batzdorfer, V., Steinmetz, H., **Biella, M.**, & Alizadeh, M. (2021). Conspiracy theories on Twitter: emerging motifs and temporal dynamics during the COVID-19 pandemic. *International Journal of Data Science and Analytics*, 13, <https://doi.org/10.1007/s41060-021-00298-6>
- Orrù, G., Bertelloni, D., Diolaiuti, F., Mucci, F., Di Giuseppe, M., **Biella, M.**, Gemignani, A., Ciacchini, R. & Conversano, C. (2021). Long-COVID Syndrome? A Study on the Persistence of Neurological, Psychological and Physiological Symptoms. *Healthcare*. <https://doi.org/10.3390/healthcare9050575>
- Pagliaro, S., ..., **Biella, M.**, et al. (2021). Trust predicts COVID-19 prescribed and discretionary behavioral intentions in 23 countries. *PLOS ONE*, 16(3), <https://doi.org/10.1371/journal.pone.0248334>
- Brambilla, M., Masi, M., Mattavelli, S., & **Biella, M.** (2021). Faces and sounds becoming one: Cross-modal integration of facial and auditory cues in judging trustworthiness. *Social Cognition*, 39(3), <https://doi.org/10.1521/soco.2021.39.3.315>
- Brambilla, M., **Biella, M.**, & Kret, M. E. (2019). The power of pupils in predicting conforming behavior. *Social Influence*, 14(2), <https://doi.org/10.1080/15534510.2019.1637775>
- Brambilla, M., **Biella, M.**, & Kret, M. E. (2019). Looking into Your Eyes: Approach and Avoidance Responses Are Modulated by Pupillary Signals. *Cognition and Emotion*, 33(3), <https://doi.org/10.1080/02699931.2018.1472554>
- Biella, M.**, & Sacchi, S. (2018). Not fair but acceptable... for us! Group membership influences the tradeoff between equality and utility in the ultimatum game. *Journal of Experimental Social Psychology*, 77, <https://doi.org/10.1016/j.jesp.2018.04.007>
- Brambilla, M., **Biella, M.**, & Freeman J. (2018). The Influence of Visual Context on the Evaluation of Facial Trustworthiness. *Journal of Experimental Social Psychology*, 78, <https://doi.org/10.1016/j.jesp.2018.04.011> (The first two authors contributed equally to this article)

Publications (working papers)

- Biella, M.**, Batzdorfer, V., Weitzel, A. I. & Unkelbach, C. (*in preparation*). Large Language Models' Alignment with Human Cognition. Exploring the Density Hypothesis in LLMs' Internal Representations and Generative Production.
- Frisancho, A., Cantoni, C., Provenzano, L., **Biella, M.**, & Aglioti, S. M. (*under review, registered report*). Using Immersive Virtual Reality to Empower Women's Leadership: Embodying Female Role Model Avatars to Enhance Public Speaking. *The Leadership Quarterly*.

Presentations

- Biella, M.** Information Sampling as a Two-Way Bridge Connecting Minds and the Environment. Organized Symposium at the *General Meeting of the European Association of Social Psychology 2026*, Strasbourg (France)
- Biella, M.** Information Sampling as a Two-Way Bridge Connecting Minds and the Environment. Organized Symposium at the *Fachgruppentagung Sozialpsychologie 2025*, Bochum (Germany)
- Biella, M.**, Hütter, M. Navigating the Social Environment Via a Sampling Approach to Trust. *Subjective Probability, Utility, and Decision Making 2025*, Lucca (Italy)

- Biella, M.** Hütter, M. Navigating the Social Environment Via a Sampling Approach to Trust. *First International Network on Trust 2025*, Genoa (Italy)
- Biella, M.** Big Data for Online Conversation Tracking. Scalable and Interpretable Topics from Online Discourse on Social Media. *SAMS 2024*, Luzern (Switzerland)
- Biella, M.** How agents' cognitive processes shape self-determined information search and the resulting judgments and decisions. *TeaP 2023*, Trier (Germany)
- Biella, M.** Social Environment and Information Structure Effects. *ESCON 2022*, Milan (Italy)
- Biella, M., & Hütter, M.** Goals Affect Impression Biases Via Information Search Strategies and Sampling Behaviors. *13th Annual General Meeting of the Society for the Science of Motivation 2021*.
- Biella, M., & Hütter, M.** Navigating the Social Environment: A Sampling Approach to Trustworthiness. *EASP General Meeting 2020*, Krakow (Poland) ^(COVID19)
- Biella, M., & Hütter, M.** The Interaction Game: Development and Validation of an Experimental Paradigm for Manipulating Social Distance. *TeaP 2020*, Jena (Germany) ^(COVID19)
- Biella, M., & Hütter, M.** Navigating the Social Environment: A Sampling Approach to Trustworthiness. *ESCON 2019*, Bordeaux (France)
- Biella, M., Speckmann, F., & Brambilla, M.** Rearranging the Face Space, an Exploration using the Spatial Arrangement Method. *ESCON 2018*, Cologne (Germany)
- Biella, M., Zogmaister, C., Ceolato, S., & Parozzi, E.** Twitter Twitter on the wall, which university's the fairest of them all? *Big Data in Psychology 2018*, Trier (Germany)
- Biella, M., Zogmaister, C., Ceolato, S., & Parozzi, E.** Twitter Twitter on the wall, which university's the fairest of them all? *Big Data, Big Challenges. Mid-term Conference, Italian Association of Sociology, Methodology Section 2016*, Milan (Italy)
- Biella, M., & Sacchi, S.** Not fair but acceptable... for us! Group membership influences the tradeoff between equity and utility in the Ultimatum Game. *ESCON 2016*, Lisbon (Portugal)

Awards

- Top Cited Article 2025.** Journal of Behavioral Decision-making. *Rebholz, Biella & Hütter (2024)*
- Best Social Psychology Paper 2019.** Italian Association of Psychology. *Biella & Sacchi (2018)*
- Best Doctoral Dissertation 2019.** Italian Association of Psychology.

Funding

- WWZ-Forum 2023. Aggressive Repositioning via Celebrity Endorsement in Advertising, With Prof. Miguel Brendl (27787 CHF)
- Google Cloud for Researchers 2022. PI: Dr. Marco Biella. Topic Modeling on the Discourse around Political Events on Twitter using Big Data and Latent Dirichlet Allocation (€ 4666)
- EASP Seedcorn Grant 2020. PI: Dr. Marco Biella. Far from fair: Social closeness affects the tradeoff between utility and fairness in decision-making (€ 2340)
- EASP Travel Grant 2018. European Association of Social Psychology Travel Grant - EASP Summer School 2018, Workshop on Motivation and control (€ 615)
- FAR 2017. PI: Prof. Marco Brambilla. Split-second detectability of moral characteristics from faces: Determinants and social implications (€ 2271)
- FAR 2015 - 2016. PI: Prof. Marco Brambilla. Your pain makes me laugh: Psychological consequences of morally wrong sources of pleasure (€ 6561)

Teaching

Teaching Experience

2025 Lecturer. *Behavioral Marketing*. University of Basel.
2024 Lecturer. *Psychometrics*. University of Bergamo.
2025, 2024, 2023 Teaching staff. *Behavioral Science*. University of Basel.
2025, 2024, 2023 Teaching staff *Consumer Behavior: Theoretical Foundations*. University of Basel.
2025, 2024, 2023 Teaching staff. *Psychological Theories in Consumer Behavior*. University of Basel.
2024, 2023 Teaching staff. *Behavioral Marketing*. University of Basel.
2021 Lecturer. *Practical Exploratory Data Analysis and Data Management*. Heidelberg University.
2020, 2019 Lecturer. *Social Psychology*. Eberhard Karls University of Tübingen
2018 Teaching staff. *Psychometric Methods*. University of Milano–Bicocca.
2017 Teaching staff. *Social Psychology of Groups*. University of Milano–Bicocca.

Thesis Supervisions

Samuel Wilson M.Sc. 5.4 (Baselⁱ)
Yorick Kirnbauer M.Sc. 5.9 (Baselⁱ)
Sewin Therampilly M.Sc. 5.6 (Baselⁱ)
Philipp Behringer B.Sc. 5.8 (Baselⁱ)
Jakob Winterhalder M.Sc. 5.8 (Baselⁱ)
Brais Canosa Calo M.Sc. 5.5 (Baselⁱ)
Dilan Tasyurdu M.Sc. 4.3 (Baselⁱ)
Laura Oswald M.Sc., 1.0 (Tübingenⁱⁱ)
Julia Henner B.Sc., 1.0 (Tübingenⁱⁱ)
Adriana Kantorova B.Sc., 1.3 (Tübingenⁱⁱ)
Matteo Masi M.Sc., 110 *cum laude* (Milanⁱⁱⁱ) *cosupervision
Althea Frisanco M.Sc., 110 *cum laude* (Milanⁱⁱⁱ) *cosupervision
Beatrice Leonardi M.Sc., 110 *cum laude* (Milanⁱⁱⁱ) *cosupervision
Fiorella Carminati M.Sc., 110 *cum laude* (Milanⁱⁱⁱ) *cosupervision

Misc

Professional Affiliations / Habilitation

Qualification aux fonctions de Maître de Conférences (section 16 - psychologie)
Society for Judgment and Decision Making
Responsible Digital Society Research Network
EASP, European Association of Social Psychology
AIP, Italian Association of Psychology – Experimental Psychology
AIP, Italian Association of Psychology – Social Psychology

Conference Organization

International Small Group Meeting - Social Cognition and Decision Sciences. July 4th – 7th, 2019, Tübingen University (Conference Funded by DFG Grant awarded to Prof. Mandy Hütter)

Service to the Scientific Community

Frontiers in Psychology, Topic Editor - Misinformation
Invited to the EASP Vision Workshop, 16-17 Oct. 2019, Amsterdam, The Netherlands
Peer reviewer (Behavior Research Methods, Scientific Reports, PLOS ONE, Group Processes and Inter-group Relations, Frontiers in Psychology, Acta Psychologica, Social Influence)

Competencies

Certifications

- Intro to Time Series Analysis in R (2021)
- Gentle Introduction to Bayesian Statistics (2018)
- Practical Machine Learning (2018)
- Regression Models (2017)
- Reproducible Research (2017)
- Statistical Inference (2017)
- Exploratory Data Analysis (2017)
- Getting and Cleaning Data (2016)
- R Programming (2016)
- The Data Scientist's Toolbox (2016)
- Meta-analysis and Results Replicability (2016)

Research Methods, Data Science

- Machine Learning (xgboost, random forest, svm, regularized regression, naive bayes, neural networks)
- Explainable Artificial Intelligence XAI (LIME, Shapley Values)
- Natural Language Processing (NLP), Topic Modeling with Latent Dirichlet Allocation
- Large Language Models / AI
- Bayesian Statistics
- Linear Mixed-Models
- Structural Equation Modeling
- Psychometrics
- Network Analysis
- Cluster Analysis (hierarchical, kmeans, dbscan)
- Multinomial Processing Tree Models
- Fault Detection, Isolation Forest

Programming Language / Software

R, Python, Tensorflow, Pytorch, cloud computing and virtual machines, Google Cloud Platform, Linux and Unix Systems, on-premise computing infrastructure (e.g., university-managed computing clusters), APIs, git.

Large Language Models / AI

Proprietary and Open-source models (Google Gemini, Meta Llama, DeepSeek R1 and distilled versions, etc.), APIs for hosted models (Google Gemini, together.ai), locally-hosted models (LM Studio, Ollama), huggingface ecosystem and transformer library.

Research Tools

PsychoPy/Pavlovia, openSesame, Gorilla, inquisit, Qualtrics, Prolific, Cloudresearch.

Reference Contacts

Prof. Klaus Fiedler, Heidelberg University - klaus.fiedler@psychologie.uni-heidelberg.de.
Prof. Christian Unkelbach, Social Cognition Center Cologne - christian.unkelbach@uni-koeln.de.
Prof. Mandy Hütter, University of Tuebingen - mandy.huetter@uni-tuebingen.de.
Prof. Rainer Greifeneder, University of Basel - rainer.greifeneder@unibas.ch.
Prof. Antonio Loprieno, University of Basel - a.loprieno@unibas.ch.

ⁱ Swiss grading system: from 1 (lowest) to 6 (highest).

ⁱⁱ German grading system: from 5 (lowest) to 1 (highest).

ⁱⁱⁱ Italian grading system: from 0 (lowest) to 110 (highest).