

CURRICULUM VITAE

GIULIA MATTAVELLI

Associate Professor in Psychobiology and Physiological Psychology at the School of Advanced Studies, IUSS Pavia

Scopus H-index: 19 Scopus total citations: 1088

National Scientific Qualification as associate professor, sector 11/E1 from 10/04/2017 to 10/04/2026.

Member of the IUSS-Maugeri Cognitive Neuroscience laboratory (<http://www.iusspavia.it/laboratorio-di-neuroscienze-cognitive>).

Member of the IUSS Cognitive Neuroscience (ICoN) research center (<http://www.iusspavia.it/iuss-cognitive-neuroscience-center-icon>).

POSITIONS AND HONOURS

Previous positions

- 2019 – 2022 Senior researcher in Psychobiology and Physiological Psychology at the School of Advanced Studies, IUSS Pavia
- 2014 – 2019 Post-Doctoral Research Fellow - Department of Psychology, University of Milano-Bicocca, Italy
- 2013 – 2014 Project contract for experimental studies with combined TMS-EEG technique with acute and chronic stroke patients. European Foundation for Biomedical Research – FERB, Cernusco SN, Milan, Italy.
- 2013 Collaboration for research activities with Prof. Dr. Hans H. Stassen for the project “The normative study: speech in healthy people and those at risk of depression”, Institute for Response-Genetics University of Zurich, Swiss.

Fellowship and Awards

- 2022 “Bando ricerca finalizzata” 2021 young researcher section of Italian Health Ministry. Head of Unit School of Advanced Studies, IUSS Pavia for the Project: “Improving motor, cognitive and social functions in patients with Parkinson's Disease: a novel approach combining electrophysiological recordings and non-invasive brain stimulation in interactive scenarios”. PI: Dr. Vanessa Era, Fondazione Santa Lucia of Rome (GR-2021-12372923, total budget 450000 Euros, unit budget 67500).
- 2022 “Bando PRIN 2022” of the Italian University Ministry Head of Unit School of Advanced Studies, IUSS Pavia for the Project “Sensing the inner bodily states: understanding the role of interoception in obesity” in collaboration with University of Trento, University of Torino, University of Bologna.
- 2021 “Bando ricerca finalizzata” 2021 young researcher section of Italian Health Ministry. Head of Unit School of Advanced Studies, IUSS Pavia for the Project: “Improving motor, cognitive and social functions in patients with Parkinson's Disease: a novel approach combining electrophysiological recordings and non-invasive brain

stimulation in interactive scenarios”. PI: Dr. Vanessa Era, Fondazione Santa Lucia Roma (GR-2021-12372923, total budget 450000 Euros, unit budget 67500).

- 2017 “Bando ricerca finalizzata” 2016 young researcher section of Italian Health Ministry. Head of Unit School of Advanced Studies, IUSS Pavia for the Project: “The impact of cognitive remediation on social functioning and neural plasticity in early psychosis: a randomized clinical trial”. PI: Dr. Cinzia Perlini, Integrated Hospital Company of Verona (GR-2016-02361283, total budget 900000 Euros, unit budget 90000).
- 2017 Second Prize Young Talented Researchers of the University Milano-Bicocca funded by the Lincei Academy, Italy.
- 2017 Travel Grant of the Italian Psychologists Association (AIP), Italy.
- 2016 Funding for supporting ERC call by Fondazione Cariplo e Regione Lombardia, University of Milano-Bicocca, Milan, Italy.
- 2013 Cognitive Neuropsychology Student Travel Prize, Cognitive Neuropsychology Journal.
- 2012 ESCoP Early Career Stimulus. Project: “Cortical excitability and effective connectivity in face processing: a TMS-EEG study”. European Society for Cognitive Psychology.
- 2010 AIP prize for young researcher. Poster presentation “The medial prefrontal cortex in emotion expressions recognition: a TMS study”. AIP conference, Bologna Italy.

Membership of Scientific Society

- 2017 – present Associate member of AIP “Italian Association Psychologists”- Experimental Psychology Section, Italy.
- 2017 – present Member of NeuroMi, Milan Center for Neuroscience, Italy.
- 2013 – present Ordinary Member of SINP “Italian Society of Neuropsychology”, Italy.

Editorial activities

Reviewer for international Journal: IScience, Social Cognitive and Affective Neuroscience, Frontiers in Psychology, Brain Research, Brain and Cognition, Journal of Neuropsychology, NeuroImage, Appetite, Brain Topography, Scientific Report, Neuroscience, Biomedical Signal Processing and Control, Behavior Research Methods.

Associate Editor for Frontiers in Psychology – Consciousness Research, Neuropsychology.

Institutional responsibilities

- 2023 – present Pro-Rector responsible for disability at IUSS.
- 2022 – present Pro-Rector responsible for equal opportunities at IUSS.
- 2019 – present Member of the Joint Student Teacher Committee (Commissione Paritetica Docenti-Studenti) at IUSS-Pavia.
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TEACHING

Course for Master's Degree (MSc) IUSS and University of Pavia in Psychology, Neuroscience and Human Sciences: “Neuroscience of eating behaviour” (a.a. 2023/24).

Ordinary course at IUSS: “Corpo, mente e cervello: psicobiologia del comportamento umano” (a.y. 2019/20; 2020/21; 2021/22; 2022/23; 2023/24).

Course for PhD Program in Cognitive Brain Sciences at IUSS: “Applications of neurophysiology” (a.y. 2022/23), “Methods and applications of neurostimulation” (a.a. 2023/24).

Course for PhD Program in Cognitive Neuroscience and Philosophy of Mind at IUSS: “Brain plasticity in experimental and clinical practice” (a.y. 2020/21; 2021/22).

Reading Group for PhD Program in Cognitive Neuroscience and Philosophy of Mind at IUSS: “Cognitive neuroscience: studies on risky and emotional behaviour” (a.y. 2020/21).

Practical Course for Master's Degree (MSc) IUSS and University of Pavia in Psychology, Neuroscience and Human Sciences: “Psychobiology of human eating behaviour: experimental and clinical research” (a.y. 2020/21; 2021/22; 2022/23).

Course for PhD Program in Cognitive Neuroscience and Philosophy of Mind at IUSS: “Cognitive enhancement: from techniques to ethical issues” (a.y. 2019/20).

Course for PhD Program in Cognitive Neuroscience and Philosophy of Mind at IUSS: “Methods in Cognitive neuroscience: fMRI, EEG, TMS, DTI” module on TMS, TMS-EEG and tDCS (a.y. 2019/20); “Methods in cognitive neuroscience: visualizing and stimulating the brain” (a.y. 2020/2021).

Other teaching and outreach invited lectures

Collegio Borromeo Pavia: Disgust. Neuropsychiatry of distaste and rejection. November 2021.

The taste of health. Event organized by the IUSS Third Mission. October 2021.

Seminar “Eating Disorders” for the postgraduate school in Food Science, San Paolo Hospital of Milan. September 2019. October 2021.

EDUCATION

2009 – 2013 PhD in "Experimental Psychology, Linguistics and Cognitive Neuroscience", Department of Psychology at University of Milano-Bicocca. Tutor: Prof. Costanza Papagno.

2012 AIP School on Methodology of Neuroscience and Imaging.

2009 Qualifying examination for profession of Psychologist at University of Pavia.

2008 University degree in CLINICAL PSYCHOLOGY AND NEUROPSYCHOLOGY at University Milano-Bicocca, Faculty of Psychology, education course of “Neuropsychology of adult and elderly people”. Title of thesis : “Decision making and somatic markers modification in frontal lobe patients”. Mark: 110/110 with honours.

2006 University degree in PSYCHOLOGICAL SCIENCES at University Milano-Bicocca, Faculty of Psychology, education course of “Evaluation, support and rehabilitation of adult and elderly people“. Title of thesis: “Evaluation and treatment of executive deficit in frontal lobe patients”. Mark: 110/110.

PUBLICATIONS

Gorrino, I., Rossetti, M.G., Girelli, F., Bellani, M., Perlini, C., **Mattavelli, G.** (2024). A critical overview of emotion processing assessment in non-Affective and affective psychoses. *Epidemiology and Psychiatric Sciences*, 33, e8.

Gerosa, M., Canessa, C., Morawetz, C., **Mattavelli, G.** (2024). Cognitive reappraisal of food craving and emotions: a coordinate-based meta-analysis of fMRI studies. *Social Cognitive and Affective Neuroscience*, 19(1), nsad077. <https://doi.org/10.1093/scan/nsad077>

Mattavelli, G., Gorrino, I., Tornaghi, D., Canessa, N. (2024). Cognitive and motor impulsivity in the healthy brain, and implications for eating disorders and obesity: a coordinate-based meta-analysis and systematic review. *Cortex*, In Press. <https://doi.org/10.1016/j.cortex.2023.10.008>

Gorrino, I., Canessa, N., **Mattavelli, G.** (2023). Testing the effect of high-definition transcranial direct current stimulation of the insular cortex to modulate decision-making and executive control. *Frontiers in Behavioral Neuroscience*, 17, 1234837

Gallucci, A., Del Mauro, L., Pisoni, A., Romero Lauro, L., **Mattavelli, G.** (2023). A systematic review of implicit attitudes and their neural correlates in eating behaviour. *Social Cognitive and Affective Neuroscience*, 18(1).

Mattavelli, G., Gorrino, I., Cesana, E., De Angelis, J., & Ricciardelli, P. (2022). Illumination and gaze effects on face evaluation: The Bi-AGI database. *Frontiers in psychology*, 13, 948142.

Mattavelli, G., Lo Presti, S., Tornaghi, D., Canessa, N. (2022). High-definition transcranial direct current stimulation of the dorsal anterior cingulate cortex modulates decision-making and executive control. *Brain Structure and Function*, 227(5), 1565–1576.

Mattavelli, G., Romano, D., Young, A., Ricciardelli, P. (2021). The interplay between gaze cueing and facial trait impressions. *Quarterly Journal of Experimental Psychology*. April 2021.

Mattavelli, G., Costanzo, F., Menghini, D., Vicari, S., Papagno, C. (2021). Local vs global processing in Williams syndrome. *Research in Developmental Disabilities*, 112, 103917

Celeghin, A., Mazzoni, N., **Mattavelli, G.** (2020). Editorial: Explicit and Implicit Emotion Processing: Neural Basis, Perceptual and Cognitive Mechanisms. *Frontiers in Psychology*, In Press.

Mattavelli, G., Barvas, E., Longo, C., Zappini, F., Ottaviani, D., Malaguti, M. C., Pellegrini, M., Papagno, C. (2020). Facial expressions recognition and discrimination in Parkinson's disease. *Journal of Neuropsychology*, In Press.

Vergallito, A.¹, **Mattavelli, G.**¹, Lo Gerfo, E., Anzani, S., Rovagnati, V., Speciale, M., Vinai, P., Vinai, P., Vinai, L., Romero Lauro, L. J. (2020). Explicit and implicit responses of seeing own vs. others' emotions: An electromyographic study on the neurophysiological and cognitive basis of the Self-Mirroring Technique. *Frontiers in Psychology*, 11, 433.

Mattavelli, G., Pisoni, A., Romero Lauro, L. J., Marino, B. Bonomi, M., Rosanova, M., Papagno, C. (2019). TMS-EEG approach unveils brain mechanisms underlying conscious and unconscious face perception. *Brain Stimulation*, 12(4), 1010-1019.

Mattavelli, G., Gallucci, A., Schiena, G., D'Agostino, A., Sassetti, T., Bonora, S., Bertelli, S., Benetti, A., Tugnioli, E., Ruggiero, G.M., Sassaroli, S., Romero Lauro, L., Gambini, O., Papagno, C. (2019). Transcranial Direct Current Stimulation (tDCS) modulates implicit attitudes towards food in Eating Disorders. *International Journal of Eating Disorders*, 52, 576–581.

Mattavelli, G., Pisoni, A., Casarotti, A., Comi, A., Sera, G., Riva, M., Bizzi, A., Rossi, M., Bello, L., Papagno, C. (2019). Consequences of brain tumour resection on emotion recognition, *Journal of Neuropsychology*, 13 (1), 1-21.

Pisoni, A.¹, **Mattavelli, G.¹**, Casarotti, A., Comi, A., Riva, M., Bello, L., Papagno, C. (2019). The neural correlates of auditory-verbal short-term memory: a voxel-based lesion-symptom mapping study on 103 patients after glioma removal. *Brain Structure and Function*, 224 (6), 2199-2211.

Pisoni, A.¹, **Mattavelli, G.¹**, Casarotti, A., Comi, A., Riva, M., Bello, L., Papagno, C. (2018). Object-action dissociation: A voxel-based lesion-symptom mapping study on 102 patients after glioma removal. *NeuroImage: Clinical*, 18, 986-995.

Mattavelli, G., Rosanova, M., Casali, A. G., Papagno, C., Romero Lauro, L. J. (2016). Timing of emotion representation in right and left occipital region: Evidence from combined TMS-EEG. *Brain and Cognition*, 106, 13-22.

Mattavelli, G., Zuglian, P., Dabroi, E., Gaslini, G, Clerici, M., Papagno, C. (2015). Transcranial Magnetic Stimulation of medial prefrontal cortex modulates implicit attitudes towards food. *Appetite*, 89,70-76.

Mattavelli, G., Sormaz, M., Flack, T., Asghar, A. U. R., Fan, S., Frey, J., Manssuer, L., Usten, D., Young, A. W., Andrews, T. J. (2013). Neural responses to facial expressions support the role of the amygdala in processing threat. *Social Cognitive and Affective Neuroscience*, 9,1684-1689

Mattavelli, G., Rosanova, M., Casali, A., Papagno, C., Romero Lauro, L. J. (2013). Top-down interference and cortical responsiveness in face processing: a TMS-EEG study. *NeuroImage*, 76, 24-32.

Mattavelli, G., Casarotti, A., Forgiarini, M., Riva, M., Bello, L., Papagno, C. (2012). Decision-making abilities in patients with frontal low-grade glioma. *Journal of Neuro-Oncology*, 110 (1), 59-67.

Mattavelli, G., Andrews, T. J., Asghar, A. U., Towler, J. R., Young, A. W. (2012). Response of face-selective brain regions to trustworthiness and gender of faces. *Neuropsychologia*, 50 (9), 2205-2211.

Mattavelli, G., Cattaneo, Z., Papagno, C. (2011). Transcranial magnetic stimulation of medial prefrontal cortex modulates face expressions processing in a priming task. *Neuropsychologia*, 49, 992-998.

Telesca, A., Vergallito, A., Consonni, M., **Mattavelli, G.**, Ferrario, A., Grazzi, L., & Usai, S. (2024). Social cognition abilities in patients with primary and secondary chronic pain, 15, (February). <https://doi.org/10.3389/fpsyg.2024.1315682>

Papagno, C., Pascuzzo, R., Ferrante, C., Casarotti, A., Riva, M., Antelmi, L., Gennari, A., **Mattavelli, G.**, & Bizzi, A. (2023). Deficits in naming pictures of objects are associated with glioma infiltration of the inferior longitudinal fasciculus: A study with diffusion MRI tractography, volumetric MRI, and neuropsychology. *Human brain mapping*, 44(10), 4011–4027.

Canessa, N., Iozzino, L., Andreose, S., Castelletti, L., Conte, G., Dvorak, A., Ferrari, C., Heitzman, J., Macis, A., Markiewicz, I., **Mattavelli, G.**, Nicolò, G., Picchioni, M., Restuccia, G., Rivellini, G., Teti, F., & de Girolamo, G. (2023). RISK aversion in Italian forensic and non-forensic patients with schizophrenia spectrum disorders. *PloS one*, 18(7), e0289152.

Vergallito, A., Varoli, E., Pisoni, A., **Mattavelli, G.**, Del Mauro, L., Feroldi, S., ... Romero Lauro, L. J. (2023). State-dependent effectiveness of cathodal transcranial direct current stimulation on cortical excitability. *NeuroImage*, 277(June), 120242.

Conca, F., Esposito, V., Rundo, F. et al. (2022). Italian adaptation of the Uniform Data Set Neuropsychological Test Battery (I-UDSNB 1.0): development and normative data. *Alz Res Therapy*, 14, 113

Lo Presti, S., **Mattavelli, G.**, Canessa, N., Gianelli, C. (2022). Risk perception and behaviour during the COVID-19 pandemic: Predicting variables of compliance with lockdown measures. *PloS ONE*, e0262319.

Lo Presti, S., **Mattavelli, G.**, Canessa, N., Gianelli, C. (2021). Psychological precursor of individual differences in COVID-19 lockdown adherence: Moderated-moderation by personality and moral cognition measures. *Personality and Individual Differences*, 182, 111090.

Barvas, E., **Mattavelli, G.**, Meli, C., Guttmann, S., Papagno, C. (2021). Standardization and normative data for a new test of visual long-term recognition memory. *Neurological Sciences*.

Barvas, E., **Mattavelli, G.**, Zappini, F., Giardina, F., Ottaviani, D., Papagno, C. (2021). Cognitive phenotypes in Parkinson's disease: A latent profile analysis. *Neuropsychology*, 35 (4), 451

Terruzzi, S., Crivelli, D., Pisoni, A., **Mattavelli, G.**, Romero Lauro, L.J., Bolognini, N., Vallar, G. (2021). The role of the right posterior parietal cortex in prism adaptation and its aftereffects. *Neuropsychologia*, 150, 107672.

Sarasso, S., D'Ambrosio, S., Fecchio, M., Casarotto, S., Viganò, A., Landi, C., **Mattavelli, G.**, Gosseries, O., Quarenghi, M., Laureys, S., Devalle, G., Rosanova, M., Massimini, M. (2020). Local sleep-like cortical reactivity in the awake brain after focal injury. *Brain*, 143 (12), 3672–3684.

Demartini, B., Volpe, R., **Mattavelli, G.**, Goeta, D., D'Agostino, A., Gambini, O. (2019) The neuromodulatory effect of tDCS in patients affected by functional motor symptoms: an exploratory study, *Neurological Sciences*, 40 (9), 1821-1827.

Torriero, S., **Mattavelli, G.**, Gerfo, E.L., Lauro, L.R., Actis-Grosso, R., Ricciardelli, P. FEF excitability in attentional bias: A TMS-EEG study (2019) *Frontiers in Behavioral Neuroscience*, 12, 333.

Varoli, E., Pisoni, A., **Mattavelli, G.**, Vergallito, A., Gallucci, A., Rosanova, M., Bolognini, N., Vallar, G., Romero Lauro, L.J. (2018). Tracking the effect of cathodal transcranial direct current stimulation on cortical excitability and connectivity by means of TMS-EEG. *Frontiers in Neuroscience*, 12.

Papagno, C., **Mattavelli, G.**, Casarotti, A., Bello, L., Gainotti, G. (2017). Defective recognition and naming of famous people from voice in patients with unilateral temporal lobe tumours. *Neuropsychologia*, 116, 194-204.

Pisoni, A., **Mattavelli, G.**, Papagno, C., Rosanova, M., Casali, A. G., Romero Lauro, L. J. (2017). Cognitive Enhancement Induced by Anodal tDCS Drives Circuit-Specific Cortical Plasticity. *Cerebral cortex*, 28 (4), 1132-1140.

Papagno, C., Minniti, G., **Mattavelli, G.**, Mantovan, L., Cecchetto, C. (2016). Tactile short-term memory in sensory-deprived individuals. *Experimental Brain Research*, 1-10.

Papagno, C., Pisoni, A., **Mattavelli, G.**, Casarotti, A., Comi, A., Fumagalli, F., Vernice, M., Fava, E., Riva, M., Bello, L. (2016). Specific disgust processing in the left insula: New evidence from direct electrical stimulation. *Neuropsychologia*, 84, 29-35.

Romero Lauro, L. J., Pisoni, A., Rosanova, M., Casarotto, S., **Mattavelli, G.**, Bolognini, N., Vallar, G. (2016). Localizing the effects of anodal tDCS at the level of cortical sources: A Reply to Bailey et al., 2015. *Cortex*, 74, 323-328.

Romero Lauro, L. J., Rosanova, M., **Mattavelli, G.**, Convento, S., Pisoni, A., Opiz, A., Bolognini, N., Vallar, G. (2014). Anodal transcranial direct current stimulation (tDCS) increases cortical excitability: direct evidence from TMS-EEG. *Cortex*, 58, 99-111.

Papagno, C., **Mattavelli, G.**, Cattaneo, Z., Romito, L., Albanese, A. (2014). Ambiguous idiom processing in PD patients. *Cognitive Neuropsychology*, 30, 495-506.

Papagno, C., Martello, G., **Mattavelli, G.** (2013). The neural correlates of abstract and concrete words: evidence from brain-damaged patients. *Brain Science*, 3, 1229-1243..

Romero Lauro, L. J., **Mattavelli, G.**, Papagno, C., Tettamanti, M. (2013). She runs, the road runs, my mind runs, bad blood runs between us: literal and figurative motion verbs. An fMRI study. *NeuroImage*, 83, 361-371.

Cattaneo, Z., **Mattavelli, G.**, Platania, E., Papagno, C. (2011). The role of the prefrontal cortex in controlling gender-stereotypical associations: A TMS investigation. *NeuroImage*, 56 (3), 1839-1846. Reprinted on Virtual Special Issue on Neuroimaging Gender Differences (2012), *Neuroimage*.

Cattaneo, Z., **Mattavelli, G.**, Papagno, C., Herbert, A., Silvanto, J. (2011). The role of the human extrastriate visual cortex in mirror symmetry discrimination: A TMS-adaptation study. *Brain and Cognition*, 77 (1), 120-127.

Milan, 11th April 2024



Autorizzo il trattamento dei miei dati personali ai sensi dell'art. 13 del D. Lgs. 196/2003 e all'art. 13 GDPR 679/16