

Curriculum Vitae

GISELLA DECARLI

E-mail: decarli.gisella@gmail.com

PRESENT AND PAST POSITIONS

2023-2024: Postdoctoral Fellow at the Department of Psychology and Cognitive Science – University of Trento

2021-2022: Postdoctoral Fellow at the Integrative Neuroscience and Cognition Center (INCC) – Université Paris Cité

2019-2021: Postdoctoral Fellow at the Department of General Psychology – University of Padova

2014-2020: Psychologist in the project “Talenti2020”, CONI (Italian National Olympic Committee) Trento, www.talenti2020.com

EDUCATION

2022: Visiting at the University of Washington (Seattle), research exchange of 10 days with the lab of Dr. Ariel Starr

2015-2019: Ph.D. in Psychological Sciences and Education, University of Trento (Thesis: “The two core systems of numerical cognition in infants and developmental dyscalculia”).
Advisors: Pr. M. Piazza and Pr. Luca Surian

2017-2018: Visiting student (3 months) at the Université Paris Descartes, under the supervision of Dr. V. Izard (Paris, France)

2016: Visiting student (3 months) at the University of Pittsburgh, under the supervision of Pr. M. Libertus (U.S.A.)

2014: Master’s Program in Learning Psychopathology, University of Padova (Italy)

2014: Specialization Course in Sport’s Psychology, Centro di Psicologia dello Sport (I.S.E.F.), Torino (Italy)

2013-2014: Specialization Course “ADHD Homework Tutor”, Edizioni Centro Studi Erickson S.p.A., Trento (Italy)

2013: Master Degree in Developmental and Educational Psychology, graduation grade: 110/110 cum laude, advisor: Pr. C. Cornoldi, University of Padova, (Italy)

2010: Bachelor Degree in Developmental and Educational Psychology, graduation grade: 110/110 cum laude, advisor: Pr. F. Simion, University of Padova, (Italy)



PUBLICATIONS

- Zasso, S., **Decarli, G.**, Vitali, F., & Franchin, L. (2023). The influence of coaches' emotions on the emotional state and performance of young tennis athletes. *Giornale Italiano di Psicologia*, in press.
- **Decarli, G.**, Zingaro, D., Surian, L., & Piazza, M. (2023). Number sense at 12 months predicts 4-year-olds' maths skills. *Developmental Science*, e13386. <https://doi.org/10.1111/desc.13386>
- **Decarli, G.**, Sella, F., Lanfranchi, G., Gerotto, G., Gerola, S., Cossu, G., & Zorzi, M. (2023). Severe Developmental Dyscalculia Is Characterized by Core Deficits in Both Symbolic and Non symbolic Number Sense. *Psychological Science*, 34(1), 8-21. <https://doi.org/10.1177/09567976221097947>
- Lunardon, M., **Decarli, G.**, Sella, F., Lanfranchi, S., Gerola, S., Cossu, G., & Zorzi, M. (2023). Low discriminative power of WISC cognitive profile in developmental dyscalculia. *Research in Developmental Disabilities*, 136. <https://doi.org/10.1016/j.ridd.2023.104478>
- **Decarli, G.**, Veggiotti, L., & de Hevia, M.D. (2022). The link between number and action in human infants. *Scientific Reports*, 12(1), 1-8. <https://doi.org/10.1038/s41598-022-07389-9>
- **Decarli, G.**, Surian, L., Vignoli, M., & Franchin, L. (2022). What teachers tell us about the impact of the Covid-19 pandemic on public education in Italy. *European Journal of Psychological of Educational Research*, 11(2), 1103-1114. <https://doi.org/10.12973/eu-jer.11.2.1103>
- **Decarli, G.**, Piazza, M., & Izard, V. (2022). Are infants' preferences in the number change detection paradigm driven by sequence patterns? *Infancy*, 1-12. <https://doi.org/10.1111/infa.12505>
- Fu, W., Dolfi, S., **Decarli, G.**, Spironelli, C., & Zorzi, M. (2022). Electrophysiological signatures of numerosity encoding in a delayed match-to-sample task. *Frontiers in Human Neuroscience*, 15. <https://doi.org/10.3389/fnhum.2021.750582>
- **Decarli, G.**, Rämä, P., Granjon, L., Veggiotti, L., & de Hevia, M.D. (2022). Electrophysiological evidence for a number-action mapping in infancy. *Brain Sciences*, 12, 1480. <https://doi.org/10.3390/brainsci12111480>
- **Decarli, G.**, Bozzetto, B., Franchin, L., & Surian, L. (2021). Un'indagine sulle buone prassi per la didattica online e per l'insegnamento della matematica indicate dagli insegnanti in epoca di Covid-19 [A survey on good practices for online teaching and mathematics teaching identified by teachers during the Covid-19 pandemic]. *Psicologia Clinica dello Sviluppo*, 2(21), 1-7.
- **Decarli, G.**, Franchin, L., Piazza, M., & Surian, L. (2020). Infants' use of motion cues in object individuation processes. *Journal of Experimental Child Psychology*, 197, 104868. <https://doi.org/10.1016/j.jecp.2020.104868>

Giuseppe Decarli

- **Decarli, G.**, Paris E., Tencati C., Nardelli C., Vescovi M., Surian L., & Piazza, M. (2020). Impaired large numerosity estimation and intact subitizing in developmental dyscalculia. *PLoS ONE*, 15(12). <https://doi.org/10.1371/journal.pone.0244578>
- Cornoldi, C., & **Decarli, G.** (2015). Gli effetti della soppressione articolatoria sugli errori di scrittura in adolescenti e giovani adulti con dislessia [The effects of articulatory suppression on spelling errors in adolescents and young adults with dyslexia]. In E. Ghidoni, G. Guaraldi, & E. Genovese (Eds.) (pp. 69-80), *Giovani adulti con DSA*. Trento: Erickson.

CONFERENCE PRESENTATIONS

- **Decarli, G.**, Surian, L., & Piazza, M. (March, 2023). Poster presentation at the “Giornate di Psicologia Clinica dello Sviluppo Bologna 2023”, Bologna, Italy.
- **Decarli, G.** (October, 2022). Ontogenesi della cognizione numerica. [*Ontogenesis of numerical cognition*]. Invited speaker for “Congresso Internazionale sui Disturbi del Neurosviluppo”. Giunti OS.
- **Decarli, G.**, & de Hevia, M.D. (2022, September). *The early link between number-action processing in preverbal infants*. Oral presenter and organizer of the symposium “*Insights on the emergence and development of number-hand interactions*” at the Conference of Associazione Italiana di Psicologia (AIP), Padova, Italy.
- **Decarli, G.**, & de Hevia, M.D. (2022, August-September). *Are infants able to integrate number and action information during the first year of life?*. Oral presentation in the symposium “*Developmental and comparative perspective on spatial numerical association*” at the European Society for Cognitive Psychology Conference (ESCOP), Lille, France.
- **Decarli, G.**, & de Hevia, M.D. (2022, August-September). *What are the origins of the number-action link?*. Oral presentation in the symposium “*Developmental and comparative perspective on spatial numerical association*” at the European Society for Cognitive Psychology Conference (ESCOP), Lille, France.
- **Decarli, G.**, & de Hevia, M.D. (2022, June). *Exploring the link between number and action: an EEG study in preverbal infants*. Poster presented at the Mathematical Cognition and Learning Society Conference (MCLS), Antwerpen, Belgium.
- **Decarli, G.**, & de Hevia, M.D. (2022, January). *Human infants’ processing of action-magnitude couplings*. Poster presented at the Budapest Ceu Conference on Cognitive Development (BCCCD22), Budapest, Hungary.
- Veggiotti, L., **Decarli, G.**, & de Hevia, M.D. (2022, January). *The link between number and action in human infants*. Poster presented at the Budapest Ceu Conference on Cognitive Development (BCCCD22), Budapest, Hungary.

Giovanni Decarli

- Zingaro, D., **Decarli, G.**, & Piazza, M. (2022, January). *The ANS is linked to and longitudinally predicts symbolic math skills in young children*. Poster presented at the Budapest Ceu Conference on Cognitive Development (BCCCD22), Budapest, Hungary.
- **Decarli, G.**, Piazza, M. & Izard, V. (2021, January). *The features underlying infants' preference in the change detection paradigm*. Poster presented at the Budapest Ceu Conference on Cognitive Development (BCCCD21), Budapest, Hungary.
- **Decarli, G.**, Sella, F., Lanfranchi, S., Lunardon, M., Cossu, G. & Zorzi, M. (2021, January). *Symbolic and non-symbolic numerical processing in developmental dyscalculia*. Poster presented at the Budapest Ceu Conference on Cognitive Development (BCCCD21), Budapest, Hungary.
- Lunardon, M., **Decarli, G.**, Lanfranchi, S., Sella, F., Cossu, G. & Zorzi, M. (2020, September). *Discalculia evolutiva e profili cognitivi: quale relazione?* [Developmental dyscalculia and cognitive profiles: what relationship?]. Video contribution presented at AIRIPA web conference, Italy.
- **Decarli, G.**, Franchin, L., Piazza, M. & Surian, L. (2020, July). *The role of motion information in infants' and adults' object individuation process*. Poster presented at the International Congress of Infant Studies (ICIS), virtual conference.
- Dolfi S., **Decarli G.**, Lunardon M., Testolin A., Sella F., Cossu G., Lanfranchi S., Zorzi M. (2020, June) *Number saliency in developmental dyscalculia*. Poster presented at the 3rd meeting of the Mathematical Cognition and Learning Society, Dublin, Ireland
- Lunardon M., **Decarli G.**, Lanfranchi S., Cossu G. & Zorzi M. (2020, March). *I profili cognitivi nella discalculia evolutiva*. [Cognitive profiles in developmental dyscalculia]. Poster presented at the "Giornate di aggiornamento sull'uso degli strumenti in psicologia clinica dello sviluppo", Bologna, Italy.
- **Decarli, G.** & Caprara, B. (2020, March). Invited speaker. *Chi ha paura della matematica? Neuroscienze e Montessori per l'ansia in matematica* [Who is afraid of maths? Neuroscience and Montessori for anxiety in mathematics]. Workshop presented at the Conference "A scuola con le neuroscienze", Bolzano, Italy.
- **Decarli, G.** (2018, November). Invited speaker. *Discalculia evolutiva: perchè alcuni bambini presentano deficit specifici nella matematica?* [Developmental dyscalculia: why do some children have specific deficits in math?]. Workshop presented at the Conference "A scuola con le neuroscienze", Bressanone, Italy.
- **Decarli, G.**, Surian, L., & Piazza, M. (2018, September). Invited speaker. *Le basi cognitive della discalculia* [The cognitive foundations of developmental dyscalculia]. Paper symposium presented at the XXVII Conference AIRIPA, Arezzo, Italy.

Giuseppe Decarli

- **Decarli, G.**, Franchin, L., Piazza, M., & Surian, L. (2018, January). *Object-tracking at ten months: the role of dynamic information*. Paper symposium presented at the Budapest CEU Conference on Cognitive Development, Budapest (BCCCD18), Hungary.
- **Decarli, G.**, Surian, L., & Piazza, M. (2017, May). *The inter-individual differences in number and face processing*. Poster presented at the CAOs Conference, Rovereto, Italy.
- **Decarli, G.**, & Piazza, M. (2016, October). *Lo sviluppo del senso del numero durante l'infanzia* [The development of number sense during infancy]. Poster presented at the XXIV Conference AIRIPA, Pesaro, Italy.
- **Decarli, G.**, & Cornoldi, C. (2016, September). *The role of articulatory suppression on spelling competences in adolescents with reading difficulties*. Poster presented at the IMBES Conference, Toronto, Canada.
- Carmignola, C., **Decarli, G.**, Carretti, B., & Cornoldi, C. (2014, October). *Le nuove prove MT di comprensione del testo: un progetto pilota* [The New Text Comprehension Battery MT: experimental project]. Poster presented at the XXIII Conference AIRIPA, Lucca, Italy.
- **Decarli, G.**, Candela, M., & Cornoldi, C. (2013, October). *La competenza ortografica in un gruppo di adolescenti con difficoltà nella lettura* [The orthographic competence in a group of adolescents with reading difficulties]. Poster presented at the XXII Conference AIRIPA, Pordenone, Italy.

OTHER PRESENTATIONS

- **Decarli, G.** (April, 2023): Exploring the cognitive processing underlying numerical cognition in typical and atypical development. Invited speaker for the “Institut de Recherche en sciences psychologiques” at the UC Louvain.
- **Decarli, G.**, & de Hevia, M.D. (September, 2022): *What are the origins of the number-action link?* Presentation for the team Language and Cognition (INCC, Université Paris Cité).
- **Decarli, G.** (January 2021): *Symbolic and non-symbolic processing in developmental dyscalculia*. Invited speaker for Mathematics Education Center, Loughborough University (UK).
- **Decarli, G.** (January 2019): *The two core systems of numerical cognition in infancy and developmental dyscalculia*. Invited speaker for a seminar, University of Padova (Italy).
- **Decarli, G.** (November 2018): *The inter-individual differences in number and face processing*. Presentation for the team Parole and Action, Université Paris Descartes (France).
- Piazza, M., & **Decarli G.** (October 2018): *Le basi cognitive della discalculia* [Cognitive bases of developmental dyscalculia]. Presentation at the training course for psychologists, Beato de Tschiderer, Trento (Italy).
- **Decarli, G.**, & De Matthaëis, M. (October, 2017). *Oltre il concetto di talento: l'importanza di stimolare impegno, fatica e responsabilità* [Beyond the concept of talent: the importance of stimulating commitment, effort and responsibility]. Teacher for the School of Sport (CONI Trento, Italy)

Giuseppe Decarli

- Piazza, M., & Decarli G. (December 2017): *State of the art and perspectives on research in the development of calculation skills during development*. Presentation at the training course for psychologists, Beato de Tschiderer, Trento (Italy).
- Decarli G. (July 2016): *The development of number sense during infancy*. Presentation for the team of Prof. M. Libertus, Pittsburgh (USA).

ACADEMIC ACTIVITY

Reviewer for the journals: "Infancy", "Frontiers in Human Neuroscience", "Developmental Science", "Brain Sciences", "Plos One", "Education Sciences", "Journal of Cognition and Development"

2023: Participation at the event "Summer Camp", University of Trento.

2023: Participation at the event "Scuola Estiva Orientamento 2023", University of Trento.

2022-2023: Teacher at the University of Rome "Tor Vergata", in "Developmental Psychology and Educational Psychology".

2022: Teaching activity in the course (2 hours): "Psicologia dello sviluppo tipico e atipico e tecniche dell'osservazione" (Pr. Laura Franchin), Department of Psychology and Cognitive Science, University of Trento.

2022: Responsible of the university course (15 hours): "Travaux dirigés, Psychologie du développement", Université Paris Cité (Paris, France).

2022: Responsible of the university course (2 hours): "Troubles spécifique des apprentissage", Université Paris Cité (Paris, France).

2022: Teaching activity (2 hours) in the course: "The cognitive and neural basis of reading and calculation" (Pr. M. Piazza), Department of Psychology and Cognitive Science, University of Trento.

2021-2022: Teaching activity in the course (6 hours): "Developmental Psychology for teaching – P24 CFU" (Pr. Laura Franchin), Department of Psychology and Cognitive Science, University of Trento.

2019-2022: Clinical activity (connected to the Cariparo project, assessment of children with dyscalculia) at the "Centro Medico di Foniatria" di Padova.

2021: Teaching activity (2 hours) in the course: "The cognitive and neural basis of reading and calculation" (Pr. M. Piazza), Department of Psychology and Cognitive Science, University of Trento.

2020: Teaching activity (2 hours) in the course: "The cognitive and neural basis of reading and calculation" (Pr. M. Piazza), Department of Psychology and Cognitive Science, University of Trento.

2019: Teaching activity (4 hours) in the course: "Learning Disabilities" (Pr. M. Zorzi), Department of General Psychology, University of Padova.

2019: Teaching activity (4 hours) in the course: "The cognitive and neural basis of reading and calculation" (Pr. M. Piazza), Department of Psychology and Cognitive Science, University of Trento.

Giuseppe Decarli

2018: Responsible of the university course (14 hours): “Methods and techniques of investigating the numerical cognition in the first years of life”, Department of Psychology and Cognitive Science, University of Trento.

2018: Participation at the project “Porte Aperte – Laboratori Didattici” (7 hours); meetings with high school students for presenting research projects, <http://events.unitn.it/porteaperte-2017>, Department of Psychology and Cognitive Science, University of Trento.

2017: Teaching activity (8 hours), in the course: “The cognitive and neural basis of reading and calculation” (Pr. M. Piazza) and “Developmental Psychology” (Pr. L. Surian), Department of Psychology and Cognitive Science, University of Trento.

2017: Participation at the project “Educa” (8 hours); presentation of research projects about numerical cognition, Con.Solida scs, Trento.

2016-2018: collaboration with the “A.P.S.P. Trento Beato de Tschiderer” for a project regarding the assessment of domain-general and domain-specific abilities in children with dyscalculia.

2016: Teaching activity (4 hours), in the course: “The cognitive and neural basis of reading and calculation” (Pr. M. Piazza) and “Developmental Psychology” (Pr. L. Surian), Department of Psychology and Cognitive Science, University of Trento.

2016-2022: Collaboration in tutorship of undergraduate and master students, mentoring experience (students from University of Trento, University of Padova, Université Paris Cité).

MEDIA AND PUBLIC OUTREACH

- 2023: Tweet about the article “Number sense at 12 months predicts 4-year-olds’ maths skills” by Communications Psychology of Nature (@CommsPsychol)
- 2023: Tweet about the article “Are infants' preferences in the number change detection paradigm driven by sequence patterns?” by ICIS Communication of Infancy (@Infantstudies)
- 2022: Speaker for “Semaine du Cerveau” at the Université Paris Cité (<https://www.semaineducerveau.fr/>)
- 2021: Interview for “Scientificast” about dyscalculia (<https://www.scientificast.it/>)

RESEARCH INTERESTS

- Numerical cognition
- Developmental dyscalculia
- Learning disabilities
- Infancy
- Sport Psychology

RESEARCH SKILLS

- Paradigms in developmental research: good knowledge of preferential looking technique, habituation technique and violation of expectation.

Gisella Deoni

- Numerical cognition tasks and analysis: good knowledge of symbolic and non-symbolic comparison task, subitizing task, symbolic comparison task.
- Programming: good knowledge of E-Prime and Matlab.
- Data analysis: good knowledge of R-Studio and G*Power, basic knowledge of EEGLAB, good knowledge Net Station for EEG analysis.
- Stimuli creation: good knowledge of Audacity, Adobe Flash and Gimp.

LANGUAGES

- English (advanced knowledge, First Certificate, level B2)
- French (advanced knowledge, Test du Connaissance du Français, level C1)
- German (basic knowledge)

Trento, 07/06/2023

Giovanni Deasi

Giovanni Deasi