

# STEFANIA PIGHIN

Curriculum Vitae  
(February 2022)

## Current Affiliation

Center for Mind/Brain Sciences (CIMEC), University of Trento  
Corso Bettini, n. 31, 38068, Rovereto, Italy  
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## Areas of interest

Judgment & Decision Making; Counterfactual Thinking & Mental Simulation; Probabilistic Reasoning;  
Medical Decision Making and Risk Communication.

## Research Positions

### Temporary Assistant Professor (Sep 2021 – present)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Role: Researcher type B - Recruitment field 11/E1 (General Psychology, Psychobiology and Psychometrics), academic discipline M-PSI/01 (General Psychology)

### Temporary Assistant Professor (Sep 2018 – Aug 2021)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Role: Researcher type A - Recruitment field 11/E1 (General Psychology, Psychobiology and Psychometrics), academic discipline M-PSI/01 (General Psychology)

### Postdoctoral Research Associate (Apr 2016 – Aug 2018)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Advisor: Prof. Katya Tentori

Role: Postdoctoral researcher working on children probabilistic reasoning, counterfactual thinking, medical decision making, and causal reasoning

### Postdoctoral Research Associate (Apr 2015 – Mar 2016)

University IUAV of Venice (Italy)

Advisor: Prof. Vittorio Girotto

Role: Postdoctoral researcher working on the design of new tools for medical risk communication

### Postdoctoral Research Associate (Mar 2014 – Feb 2015)

University IUAV of Venice (Italy)

Advisor: Prof. Vittorio Girotto

Role: Postdoctoral researcher working on risk and probability communication in the medical domain

### Temporary Research Position (Nov 2012 – Dec 2013)

Center for Research Mountain, Sport and Health (CeRISM) - University of Verona (Italy)

Advisor: Prof. Federico Skena

Role: Researcher working on the effect of mild hypoxia on decision making

### Postdoctoral Research Associate (Oct 2011 - Sep 2012)

Center for Research Mountain, Sport and Health (CeRISM) - University of Verona (Italy)

Advisor: Prof. Federico Skena

Role: Researcher working on decision making in adverse environments

### Postdoctoral Research Associate (Sep 2010 - Aug 2011)

Center for Research Mountain, Sport and Health (CeRISM) - University of Verona (Italy)

Advisor: Prof. Federico Skena

Role: Researcher working on decision making in adverse environments

### Postdoctoral Research Associate (May 2009 - Aug 2010)

Centre National de la Recherche Scientifique – University of Toulouse (France)  
Advisor: Prof. Jean-François Bonnefon  
Role: Researcher working on probabilistic reasoning in medical decision making

## Other research experiences

### **Temporary Research Fellow** (March 2004 – Apr 2009)

Department of Cognitive Sciences and Education – University of Trento (Italy)

Advisor: Prof. Lucia Savadori

Role: Researcher working on the European Project SAFE (*Special Non-Invasive Advances in Foetal and Neonatal Evaluation Network*)

### **Doctoral research experience** (2005)

Psychology Department, Trinity College Dublin (Ireland)

Supervisor: Prof. Ruth Byrne

Role: Researcher working on mental simulation and post decisional counterfactual thinking

### **Research internship** (2002 – 2003)

University IUAV of Venice (Italy)

Supervisor: Prof. Vittorio Girotto

Role: Researcher working on children probabilistic reasoning and on post decisional counterfactual thinking

## Academic degrees

### **National Qualification for the Associate Professorship in General Psychology, Psychobiology, and Psychometrics** (11/E1) (04/2018 - 04/2024)

“Abilitazione Scientifica Nazionale” - DD n. 222/2012 - (Italy)

### **PhD in Cognitive Sciences and Education** (2003 – 2006)

Department of Cognitive Sciences and Education – University of Trento (Italy)

Supervisors: Prof. Vittorio Girotto & Prof. Lucia Savadori

Thesis: “Counterfactual thoughts about experienced, observed and narrated events”

### **Master Degree in Psychology** (1997 – 2003)

Department of Psychology – University of Trieste (Italy)

Supervisor: Prof. Vittorio Girotto

Thesis: “An actor-reader effect in post decisional counterfactuals”

## Involvement in funded research projects

- 2020-present “Migliorare la comprensione dei risultati dei test diagnostici grazie all’Intelligenza Cognitivo-Artificiale – CAI-3”  
University of Trento “Covid-19”
- 2013-2014 “Effetto dell’esercizio fisico in ambiente freddo e ipossico sulle decisioni in condizione di rischio”  
University of Trento “Universiadi 2013”
- 2010-2011 “Problem solving e decisione: aspetti logici, psicologici e neuroscientifici nell’ambito della giustizia penale”  
Italian Ministry of University and Scientific Research  
PRIN Grant RP5RNM
- 2003-2009 “Special Non-Invasive Advances in Foetal and Neonatal Evaluation Network”  
European Commission –The Sixth Framework Programme  
Grant no. 503243

## Workshop and conference organization

**“17 Annual Conference of the Italian Association of Cognitive Science”**

International conference, Noto, Italia – 13/15 Dec 2021

**“6th International Conference on Thinking”**

International conference, Venezia, Italia – 21/23 Aug 2008

**“Giudizio e Decisione”**

Giornata in onore di Michel Gonzalez, Venezia, Italia – 02 Oct 2014

## Professional memberships

### Scientific Boards

2020-present: AISC – Italian Association for Cognitive Science

### Scientific Societies

European Association for Decision Making (EADM)

## Reviewing activity

### Ad-hoc reviewer for academic journals:

Cognition; Journal of experimental psychology: Memory, learning and cognition; Judgment and Decision Making; Medical Decision Making; Memory & Cognition; Organizational behavior and human decision processes; Patient Education and Counseling; Psychological Research; Quarterly Journal of Experimental Psychology; Quarterly Research for Exercise and Sport; Stress: The International Journal on the Biology of Stress

### Reviewer for funding agency:

The Leverhulme Trust, UK

## Teaching experiences

### Professor (2021-2022, 42h)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Course: “Advance topics of Reasoning and Decision Making”

### Professor (2019-2020; 2020-2021; 2021-2022; 21h)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Course: “Foundation of Cognitive Psychology & Neuroscience II”

### Professor (2019-2020; 2020-2021, 13h)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Course: “Advanced Cognitive Psychology and Neuroscience”

### Professor (2019-2020: 2020-2021, 27h)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Course: “Advance topics of Reasoning and Decision Making”

### Professor (2018-2019, 16h)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Course: “Foundation of Cognitive Psychology”

### Guest Lecturer (Oct 2017, 6 h)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Course: “Psychology of Thinking”, tenured professor Katya Tentori

### Guest Lecturer (Nov 2016, 6 h)

Center for Mind/Brain Sciences (CIMEC) – University of Trento (Italy)

Course: “Psychology of Thinking”, tenured professor Katya Tentori

### Adjunct professor (Sep 2015 – Jun 2016, 30 h)

University IUAV of Venice (Italy)

Course: "Fundamentals of general psychology"

**Guest Lecturer** (Mar 2015, 8 h)

University IUAV of Venice (Italy)

Course: "Psychology of Thinking", tenured professor Vittorio Girotto

**Guest Lecturer** (Nov 2014 – Dec 2014, 10 h)

University IUAV of Venice (Italy)

Course: "Fundamentals of general psychology", tenured professor Vittorio Girotto

**Guest Lecturer** (May 2014, 6 h)

University IUAV of Venice (Italy)

Course: "Psychology of Thinking", tenured professor Vittorio Girotto

## Other academic services

### Research advisory and mentoring

#### Postdoctoral researchers

Benjamin Timberlake (CIMEC, University of Trento)

#### PhD students

Alessandro Bogani (PhD in Cognitive and Brain Sciences, University of Trento)

#### Graduate students

Lissi Schoenneger (Degree in Cognitive Science, CIMEC, University of Trento)

#### Undergraduate students

Laura Bormolini (Degree in Interfaces and communications technologies, DiPSCo, University of Trento – Co-supervisor: Prof. Katya Tentori)

### Doctoral Services

#### Member of the Executive Committee of the following PhD program

2019 – present "Cognitive and Brain Sciences", CIMEC, University of Trento

#### Member of the Steering Committee of the following PhD programs

2018 – present "Cognitive and Brain Sciences", CIMEC, University of Trento

### Invited talks

**Pighin, S.** "How to improve public interpretation of probabilistic test results: Distributive assessments of chances" presso Faculté de droit, des sciences criminelles et d'administration publique dell'Université de Lausanne, Losanna, Svizzera. April 2017.

**Pighin, S.** "Mild Hypoxia & Decision Making under Risk". Meeting "Giudizio e Decisione – Giornata in onore di Michel Gonzalez", Venezia, Italia. October, 2014.

**Pighin, S., Bonini, N., Savadori, L., Hadjichristidis, C., & Schena F.** "Mild hypoxia and Decision Making under Risk". International Workshop "Risk and Social Preferences", Trento, Italia. October, 2012.

**Pighin, S., Bonnefon, J., Savadori, L.** "Valutazione e comunicazione dei rischi nella diagnosi prenatale". Workshop: Vedere la decisione migliore, Venezia, Italia. March, 2010.

### Refereed conference

**Bogani, A., Tentori, K., Ferrante, D., & Pighin, S.** – Talk – "To what extent does counterfactual thinking prepare us for the future?". 17<sup>th</sup> Annual Conference of the Italian Association of Cognitive Science, Noto, Italy. December, 2021.

**Pighin, S., Byrne, R. & Tentori, K.** – Talk – "“If only” counterfactual thoughts in social dilemma games". IAREP-SABE 2021 Annual Conference of the International Association for Research in Economic Psychology – Virtual Conference. July, 2021.

**Pighin, S., Girotto, V. & Tentori, K.** – Poster presentation – "Children's quantitative Bayesian inferences".

Ten years of Mind/Brain Sciences at the University of Trento, Rovereto (TN), Italia. November, 2017.

**Pighin, S., Tentori, K., & Giroto, V.** – Talk – “Children Bayesian inferences from natural frequencies & number of chances”. Meeting in Memory of Vittorio Giroto, London, UK. July, 2016.

**Giroto, V., & Pighin, S.** – Talk – “Errors in diagnostic reasoning: reliable and unreliable remedies”. The 9th London Reasoning Workshop. London, UK. July, 2015.

**Bonini, N., Pighin, S., Rettore, E., Savadori, S., Schena, F., Tosi, P., Zec, S.** – Talk – “Cognitive biases in the mountaineers’ assessment of the avalanche risk”. International Congress Mountain, Sport & Health, Rovereto (TN), Italia. December, 2013.

**Savadori, S., Pighin, S., Bonini, N., Andreozzi, L., Pellegrini, B., Schena, F.** – Talk – “Risky decisions in winter mountain sports”. Winter Universiade Conference 2013, Rovereto (TN), Italia. December, 2013.

**Pighin, S., Bonini, N., Savadori, L., Hadjichristidis, C., Antonetti, T., & Schena F.** – Talk – “Deciding under Hypoxia: Increased Risk Seeking at Simulated High Altitude”. International Congress Mountain, Sport & Health, Rovereto (TN), Italia. November, 2011.

**Pighin, S., Bonini, N., Savadori, L., Hadjichristidis, C., Antonetti, T., Schena F.** – Poster presentation – “Simulated Altitude and risk taking: higher reflection effect in 3000 m than on sea level”. Subjective Probability, Utility, and Decision Making Conference, Kingston upon Thames, UK. August, 2011.

**Pighin, S., Bonnefon, J.F. & Savadori, L.** – Talk – “Overcoming number numbness in Prenatal Risk Communication”. European Society for Risk Analysis –Annual Conference, London, UK. June, 2010.

**Savadori L., Barilli E., Pighin S.** – Talk – “Influence of the perceived severity of disease on probability sensitivity”. Annual Meeting of the Society for Risk Analysis, Boston, USA. December, 2008.

**Savadori L., Barilli E., Pighin S., Siegrist M., Tyszka T., Mullet E.** – Poster presentation – “Un corso on-line di comunicazione del rischio nella diagnosi prenatale.” Congresso nazionale Associazione italiana di psicologia: sezione di psicologia sperimentale, Padova, Italia. September 2008.

**Pighin S., Byrne R., Ferrante D., Gonzalez M., & Giroto V.** – Talk – “Cognitive empathy and counterfactual thinking”. 6th International Conference on Thinking, Venezia, Italia. August, 2008.

**Pighin S.** –Talk – “Psychological aspects of risk assessment in NIPD”. SAFE General Assembly, Tarragona, Spagna. May, 2008.

**Barilli E., Savadori L., Pighin S., Siegrist M., Tyszka T., Mullet E.** – Talk – “Risk communication aid. A free web tutorial for communicating risk in prenatal diagnosis.” 20th European Congress of Obstetrics and gynecology (EBCOG) and 18th Portuguese Congress of Obstetrics and gynecology (PCOG), Lisbona, Portogallo. March, 2008.

**Savadori, L., Pighin, S., Barilli, E., Cremonesi, L., Ferrari, A., Ferrari M.** – Talk – “Comunicare il rischio clinico: quando a numeri assoluti più grandi corrispondono probabilità percepite più piccole”. Congresso Annuale Associazione Italiana di Psicologia - Sezione di Psicologia Sperimentale, Rovereto, Italia. September, 2007.

**Barilli, E., Savadori, L., Pighin, S., Siegrist, M., Tyszka, T., Mullet, E.** – Poster presentation – “Come comunicare il rischio ai pazienti? Un tutorial on-line per medici, staff clinico ed educatori delle professioni sanitarie”. Congresso Annuale Associazione Italiana di Psicologia - Sezione di Psicologia Sperimentale, Rovereto, Italia. September, 2007.

**Giroto, V., Pighin, S., Byrne, R., Ferrante, D. & Gonzalez. M.** – Talk – “Focussing effects in counterfactual thinking”. International Meeting on Mental Models and Reasoning, Dublin, Ireland. March, 2006.

**Pighin S., Giroto V., Gonzalez, M., Savadori L. & Barilli E.** – Talk – “How to achieve a better understanding of test accuracy in prenatal diagnosis”. CNAPS - Fourth International Conference on Circulating Nucleic Acids in Plasma and Serum, London, UK. September, 2005.

**Barilli E., Savadori L., Pighin S. & Rumiati R.** – Talk – “The use of simulation heuristic to increase numerical risk comprehension”. CNAPS - Fourth International Conference on Circulating Nucleic Acids in Plasma and Serum, London, UK. September, 2005.

**Savadori L., Pighin S., Barilli E., Rumiati R. & Tentori K.** – Talk – “Using Comparison Scenarios to Increase Risk Comprehension”. SPUDM 20 - Biennial Conference on Subjective Probability, Utility and Decision Making, Stockholm, Sweden. August, 2005.

**Giroto V., Ferrante D. & Pighin S.** – Talk – “Counterfactual Decisions”. Meeting Happiness, Economics, and Interpersonal Relationships, Trento, Italia. December, 2004.

**Giroto V., Ferrante D. & Pighin S.** – Talk – “Counterfactual Decisions”. V International Conference on Thinking, Leuven, Belgio. July, 2004.

## **Publications in international peer-review journals**

**Tentori, K., Passerini, A., Timberlake, B., & Pighin, S. (2021)** The public’s misunderstanding of vaccine efficacy. *Social Science & Medicine*, 289, 114273.

**Pighin, S., Byrne, R. & Tentori, K. (2021)** “If Only” Counterfactual thoughts about cooperative and uncooperative decisions in social dilemmas. *Thinking & Reasoning*, 1-33.

**Pighin, S., & Tentori, K. (2021).** Public’s understanding of swab test results for SARS-CoV-2: an online behavioural experiment during the April 2020 lockdown. *BMJ open*, 11(1), e043925.

**Mangiarulo, M., Pighin, S., Polonio, L., & Tentori, K. (2021).** The effect of evidential impact on perceptual probabilistic judgments. *Cognitive Science*, 45(1), e12919.

**Stephan, S., Tentori, K., Pighin, S., & Waldmann, M.R. (2021).** Interpolating Causal Mechanisms: The Paradox of Knowing More. *Journal of Experimental Psychology: General*. Doi:10.1037/xge0001016

**Pighin, S., & Tentori, K. (2021).** The challenge of mental simulation in preference-sensitive treatment decisions. *Translational behavioral medicine*, 11(1), 276-278.

**Pighin, S., Bonini, N., Hadjichristidis, C., Schena, F., & Savadori, L. (2020).** Decision making under stress: mild hypoxia leads to increased risk-taking. *Stress*, 23(3), 290-297.

**Bonini, N., Pighin, S., Rettore, E., Savadori, L., Schena, F., Tonini, S., & Tosi, P. (2019).** Overconfident people are more exposed to “black swan” events: a case study of avalanche risk. *Empirical Economics*, 57(4), 1443-1467.

**Tentori, K., Pighin, S., Divan, C., & Crupi, V. (2018).** Mind the gap: Physicians' assessment of patients' importance weights in localized prostate cancer. *Plos One*, 13(7): e0200780.

**Pighin, S., Tentori, K., Savadori, L., & Giroto, V. (2018).** Fostering the understanding of positive test results. *Annals of Behavioral Medicine*, 52, 909–919.

**Brase, G., Pighin, S., & Tentori, K. (2018).** (Yet) Another chance for good reasoning? A commentary and reply on Pighin, Tentori, and Giroto (2017). *Psychonomic Bulletin & Review*, 25, 1220–1223.

**Pighin, S., Giroto, V., & Tentori, K. (2017).** Children's quantitative Bayesian inferences from natural frequencies and number of chances. *Cognition*, 168, 164-175.

**Pighin, S., Tentori, K., & Giroto, V. (2017).** Another chance for good reasoning. *Psychonomic Bulletin & Review*, 24(6), 1995-2002.

**Pighin, S., Gonzalez, M., Savadori, L., & Giroto, V. (2016).** Natural frequencies do not foster public understanding of medical test results. *Medical Decision Making*, 36(6), 686-91.

**Pighin, S., Savadori, L., Bonini, N., Andreozzi, L., Savoldelli, A., & Schena, F. (2015).** Acute exercise increases sex differences in amateur athletes’ risk taking. *International Journal of Sports Medicine*, 94(10), 858-863.

**Pighin, S., Savadori, L., Barilli, E., Galbiati, S., Smid, M., Ferrari, M., & Cremonesi, L. (2015).** Communicating Down's syndrome risk according to maternal age: "1-in-X" effect on perceived risk. *Prenatal Diagnosis*, 35(8), 777-782.

**Giroto, V., & Pighin, S. (2015).** Basic understanding of posterior probability. *Frontiers in Psychology*, 6:680.

**Pighin, S., Gonzalez, M., Savadori, L., & Giroto, V. (2015).** Improving Public Interpretation of Probabilistic Test Results: Distributive Evaluations. *Medical Decision Making*, 35(1), 12-5.

**Pighin, S., Bonini, N., Savadori, L., Hadjichristidis, C., & Schena F. (2014).** Loss aversion and hypoxia: Less loss aversion in oxygen depleted environment. *Stress*, 17(2), 204-210.

**Pighin, S., Savadori, S., Barilli, E., Rumiati, R., Bonalumi, S., Ferrari, M., Cremonesi, L. (2013).** Using comparison scenarios to improve prenatal risk communication. *Medical Decision Making*, 33(1), 48-58.

**Pighin, S., Bonini, N., Savadori, L., Hadjichristidis, C., Antonetti, T., & Schena F. (2012).** Decision making under hypoxia: Oxygen depletion increases risk seeking for losses but not for gains. *Judgment and Decision Making*, 7, 472-477.

**Pighin S., Bonnefon J.F., & Savadori L. (2011).** Overcoming number numbness in prenatal risk communication. *Prenatal Diagnosis*, 31(8), 809-13.

**Pighin S., Savadori, S., Barilli E., Cremonesi L., Ferrari M., & Bonnefon J.F. (2011).** The '1 in X' effect on the subjective assessment of medical probabilities. *Medical Decision Making*, 31(5), 721-9.

**Pighin S., & Bonnefon J.F. (2011).** Facework and Uncertain Reasoning in Health Communication. *Patient Education and Counselling*, 85(2), 169-72.

**Pighin S., Byrne R.M., Ferrante D., Gonzalez M., & Giroto V. (2011).** Counterfactual Thoughts about Experienced, Observed and Narrated Events. *Thinking and Reasoning*, 17(2), 197-211.

**Barilli E., Savadori L., Pighin S., Cremonesi L., Bonalumi S., Ferrari A., & Ferrari M. (2010).** From Chance to Choice: the Use of a Visual Analogy in the Communication of Risk. *Health, Risk and Society*, 12(6), 546-559.

**Giroto, V., Ferrante, D., Pighin, S., & Gonzalez, M. (2007).** Postdecisional counterfactual thinking by actors and readers. *Psychological Science*, 28(6), 510-515.

## **Manuscripts under review**

**Tentori, K., Pighin, S., Giovannazzi, G., Grignoli, A., Timberlake, B., & Ferro, A.** Default change nudges Covid-19 vaccine uptake: A randomized controlled trial. *Vaccine*.

## **Other Publications**

**Ugolini, C., Antonucci, D., Belleri, A., Ciolli, V., Tentori, K., & Pighin, S. (2019).** Coniugare risparmio energetico e comfort abitativo è ora possibile grazie al progetto Klimakit e al suo innovativo sistema di monitoraggio: una valida iniziativa per sostenere il mercato delle ristrutturazioni energetiche in Alto Adige. *Comfort abitativo al giusto prezzo*.

**Pighin, S. (2019).** Effetti psicologici dell'ipossia lieve: un pericolo nascosto. "Prevenzione dei sinistri in area valanghiva. Attività sportive, aspetti normativo-regolamentari e gestione del rischio." Conference Proceedings – Trento (Italy).

**Giroto, V., & Pighin, S. (2015).** Vincoli esterni e interni e scelte individuali. *Giornale Italiano di Psicologia*, 42, 135-140.

**Barilli E., Pighin S., Savadori L., Rumiati R. (2005).** Comunicare il rischio in ambito medico. "Rischi e comunicazione del rischio" Conference Proceedings – Padova (Italy).