

GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

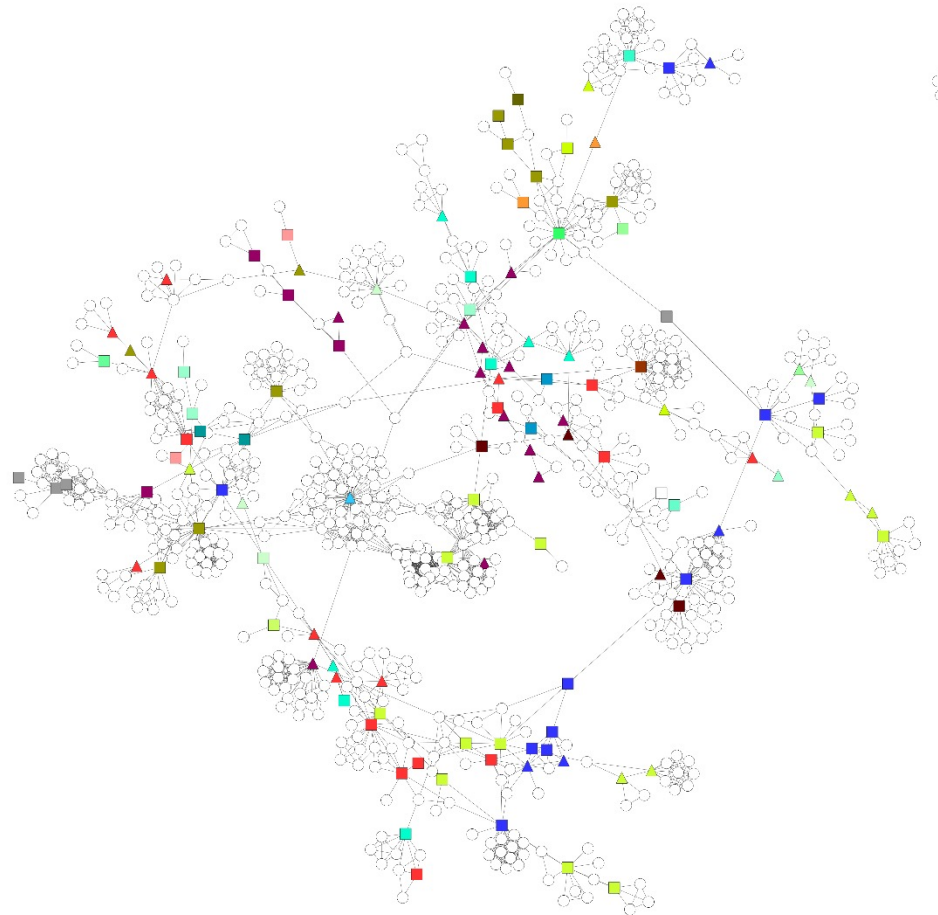
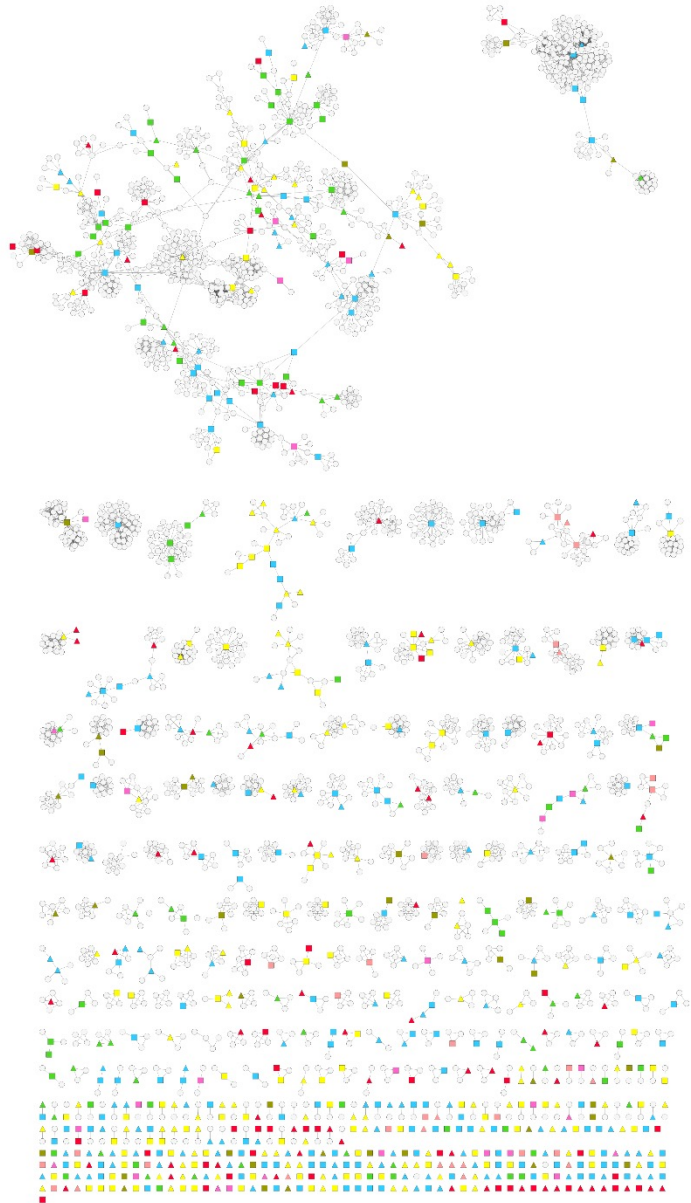
Members

Reti di collaborazione e produttività tra i sociologi italiani

Aliakbar Akbaritabar
Flaminio Squazzoni

Punti chiave del progetto

- **In breve:** qual è la produttività dei sociologi italiani in termini di ricerca? Come i sociologi italiani collaborano tra loro?
- **Metodologia:** Hierarchical liner models, Network analysis
- **Campione:** Tutti i sociologi italiani nel sito MIUR 2016 (#1227 ppl)
- **Risultati:** 33% dei sociologi non ha alcuna pubblicazione indicizzata in Scopus. 30% dei restanti ne ha al massimo una.
- **Implicazioni:** le implicazioni riguardano le procedure di valutazione della ricerca e di allocazione dei fondi. I nostri risultati mostrano che le procedure correnti possono essere arricchite con indicatori bibliometrici e indicatori di contesto.



GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

Members

Comunicazione e Comportamento di Gruppo in un Mercato Finanziario Artificiale

**Manuela Testa
Flaminio Squazzoni
Marco Castellani**

Punti chiave del progetto

- **In breve:** la diversità di genere e la comunicazione diretta influisce sugli investimenti finanziari? Utilizzando un mercato finanziario artificiale, studiamo dinamiche di genere in finanza.
- **Metodologia:** esperimenti in laboratorio. Campione: 104 studenti di scienze economiche, 52 maschi e 52 femmine.
- **Risultati:** ci sono significative differenze di genere. Per esempio, i maschi hanno usato la chat per parlare del mercato e delle strategie da usare, mentre le femmine parlavano di tutt'altro. La comunicazione ha un impatto positivo sui guadagni. La numerosità dei messaggi scambiati e il contenuto sembrano essere determinanti per l'aumento del guadagno rispetto allo scambio senza comunicazione.

ChatGroup 0: Male

		0	2 -	dovete comprare a 100	
	14	0	2 -	si	
	13	6	0	2 -	tutt appost?
4	13	1	0	2 -	ma chi è che ha messo quei paio di ordini a 100 sbagliati
4	13	2	0	2 -	altrimenti il sistema collassa
4	13	2	0	2 -	ahahaha
4	13	2	0	2 -	voi fatelo
4	13	2	0	2 -	vendete ad 2 o 3 euro
4	13	2	0	2 -	e comprate a 97 96
4	13	14	0	2 -	diminuite i prezzi raga
	13	2	0	2 -	easy
	13	6	0	2 -	e comprate a 100
		2	0	2 -	troppo
			2 -	susu	

-> treat = 1, session = 170613_1309, group = 2, chatgroup = 0
Omogeneous gender chatroom

Variable	Obs	Mean	Std. Dev.	Min	Max
earnings1	96	1008.5	325.6888	653	1465
earnings2	96	1245.5	641.9265	537	2282

chatgroup = 1

Variable	Obs	Mean	Std. Dev.	Min	Max
earnings1	96	1505.5	758.8286	742	2760
earnings2	96	956.5	348.9754	378	1299

ChatGroup 1: Female

1	2 -	hola
1	2 -	buenos dias
13	1	hellooo
15	1	ahaaaaa
15	15	Non parlo spagnolo
15	13	e che parli?
15	15	che lingua sai parlare ancora?
15	9	inglese?
15	15	parlo Francese
15	9	bonjour
15	15	inglese poco
5	15	bonjour
13	1	e vendeteli sti titoli
15	1	Bonjour
1	2 -	hahaha

GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

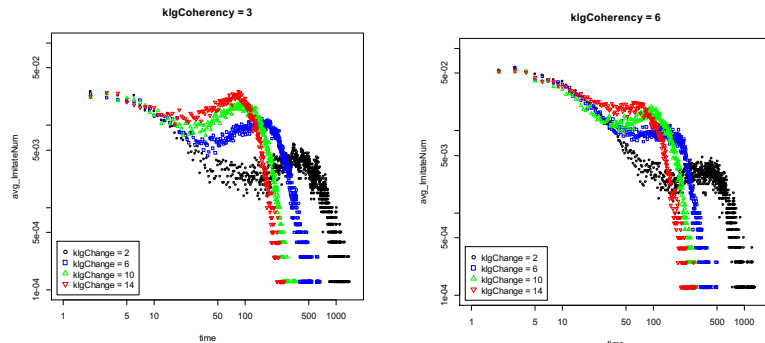
Members

The role of cognitive artifacts in organizational routine dynamics: An agent-based model

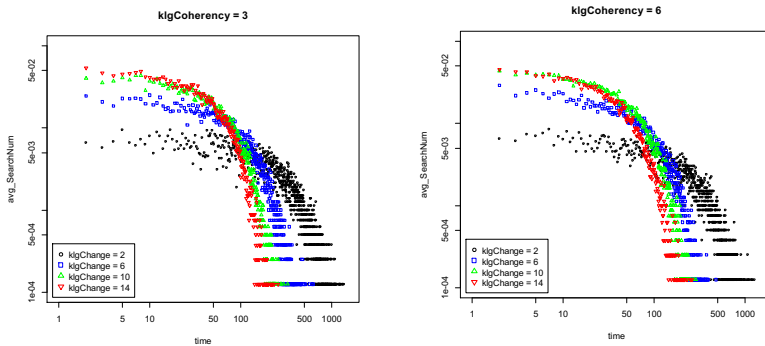
Dehua Gao, Flaminio Squazzoni

Punti chiave del progetto

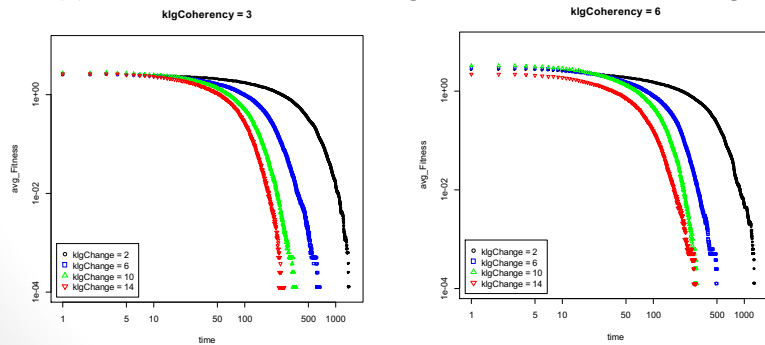
- **In breve:** il progetto indaga il ruolo che gli artefatti cognitivi possono giocare nella formazione e nel cambio delle routine organizzative.
- **Metodologia:** Agent-based modeling and simulation
- **Risultati:** i due tipi di conoscenza legata alle routine organizzative (standardizzazione e regolamentazione VS norme che sostengono le capacità esplorative degli individui) hanno diversi effetti sulla dinamica delle routine. Quando i due tipi di conoscenza sono combinati, le routine sono più efficaci.
- **Implicazioni:** il design organizzativo dovrebbe cercare di armonizzare standardizzazione e esplorazione individuale e cercare un equilibrio efficiente tra la dinamica degli artefatti cognitivi, l'inerzia organizzativa e l'ambiente dinamico in cui vive l'organizzazione.



(a) The number of individual actor agents involved in imitating activities

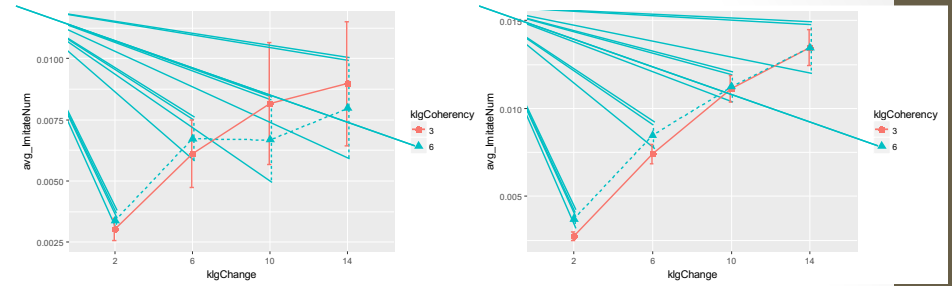


(b) The number of individual actor agents involved in action-searching activities

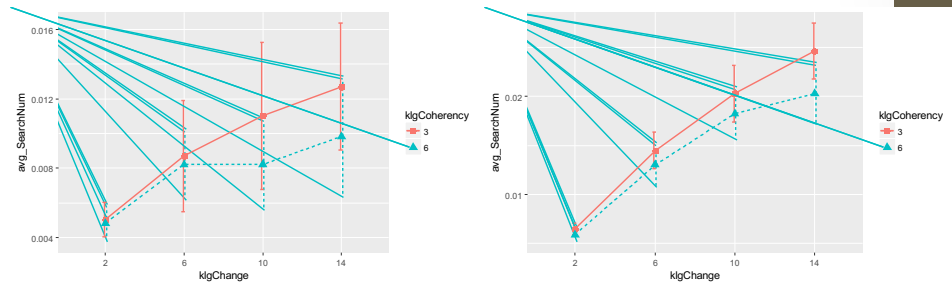


(c) The average fitness value of all the individual actor agents

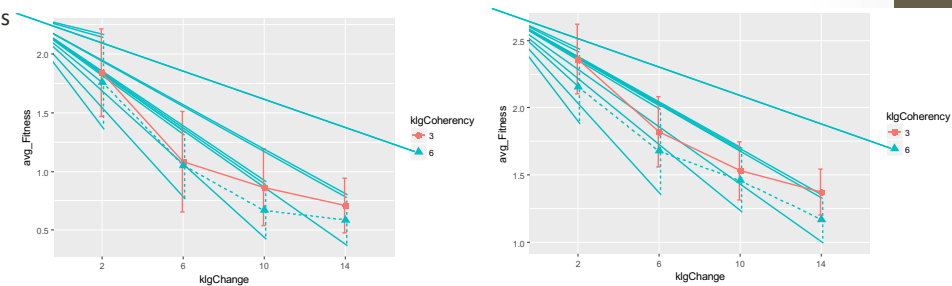
Fig.3 Outputs of the agent-based model with scenario I



(a) *avg_ImitateNum* (Left: *varyProbability* = 0.005; Right: *varyProbability* = 0.015)



(b) *avg_SearchNum* (Left: *varyProbability* = 0.005; Right: *varyProbability* = 0.015)



(c) *avg_Fitness* (Left: *varyProbability* = 0.005; Right: *varyProbability* = 0.015)

Fig.6 Statistic analysis of the simulation results with scenario II

GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

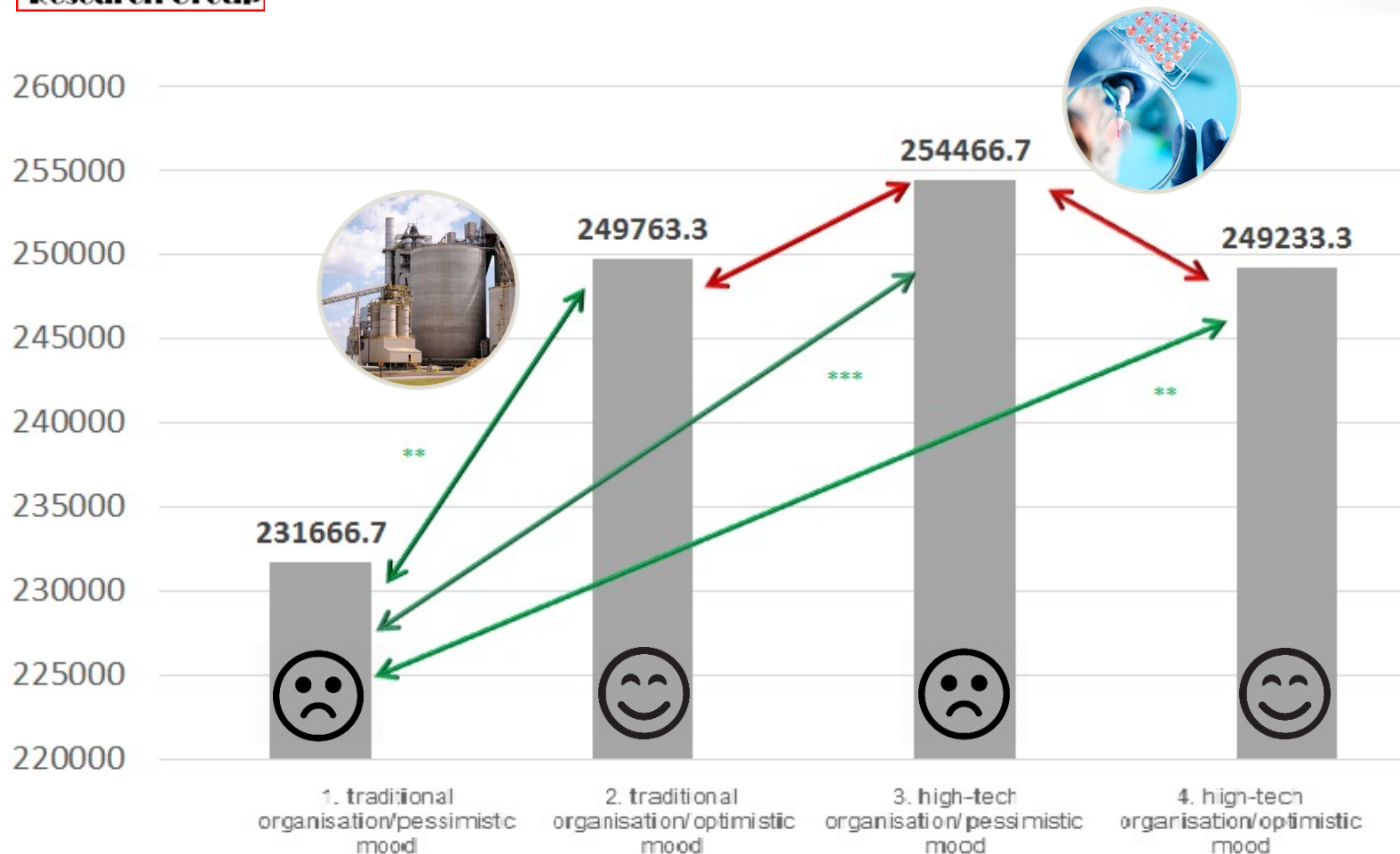
Members

L'impatto dell'umore sociale sulle strategie di business attraverso l'analisi decisionale in diversi contesti organizzativi

**Linda Alengoz,
Marco Castellani,
Flaminio Squazzoni**

Punti chiave del progetto

- **In breve:** Verificare se l'umore sociale ha un'influenza sul processo decisionale in contesto di incertezza
- **Metodologia:** Esperimento nel laboratorio ha incluso 165 studenti di Economia & Management
- **Risultati:** anche se sembra difficile pensare di assumere opzioni di investimento rischiose quando il contesto di business è pessimistico, alcune caratteristiche specifiche dell'azienda possono cambiare drasticamente la propensione al rischio dei soggetti. Nell'esperimento, le aziende high-tech sono state in grado di filtrare gli effetti del umore sociale e di essere più resistenti ai cambiamenti di umore e così investire di più nelle alte strategie rischiose (ad esempio, il lancio di nuovi mercati e di investimento nelle risorse umane). Inoltre, il pessimismo potrebbe incoraggiare gli innovatori nei confronti delle decisioni ad alto rischio.



Questo significa non solo che l'umore sociale potrebbe avere un'influenza drammatica sul processo decisionale; ma significa anche che le informazioni apparentemente irrilevanti, che non è direttamente correlata al mercato business, possono influenzare il processo decisionale.

GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

Members

Influenza sociale, discriminazione basata sull'età e procedure di assunzione: una ricerca sperimentale

**Yulia Dormidontova
Marco Castellani
Flaminio Squazzoni**

- Sono le caratteristiche soggettive del reclutatore (cioè, genere, età) o le caratteristiche obiettive del posto vacante (cioè, funzioni esecutive o operative) che rendono più probabile la discriminazione tra i candidati di lavoro?
- L'influenza sociale (cioè informazioni sulle scelte discriminatorie precedenti effettuate da altri reclutatori) aumenta il livello di discriminazione nei confronti di candidati più anziani nell'assunzione?

Punti chiave del progetto

- Ipotesi 1. Per i posti vacanti con prevalenti funzioni operative, se la sola differenza tra i due candidati è l'età, i reclutatori sceglieranno i candidati più giovani, discriminando sistematicamente i candidati più anziani.
- Ipotesi 2. Per i posti vacanti con funzioni esecutive, se la sola differenza tra i due candidati è l'età, non ci sarà discriminazione basata sull'età.
- Ipotesi 3. Per i posti vacanti che richiederanno l'uso di tecnologie multiuso, i lavoratori più anziani saranno discriminati nei confronti dei lavoratori più giovani, perché una formazione formale aggiornata sarà valutata più di una formazione aggiornata al lavoro.
- Ipotesi 4. La discriminazione basata sull'età tenderà ad amplificarsi quando i reclutatori saranno informati dei dati "statistici" sulle decisioni normalmente prese dai suoi colleghi in merito a questi tipi di posti vacanti. Questo effetto sarà indipendente dal tipo di posto vacante.
- **Metodologia:** esperimento in laboratorio

GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

Members

Immigrant entrepreneurship and innovation

Project for PhD Research of Juan Francisco Alvarado
Supervised by Prof. Flaminio Squazzoni
Research assistant: Linda Alengoz

Punti chiave del progetto

In breve: il progetto esplora il fenomeno dell'imprenditorialità dei migranti nella città di Brescia.

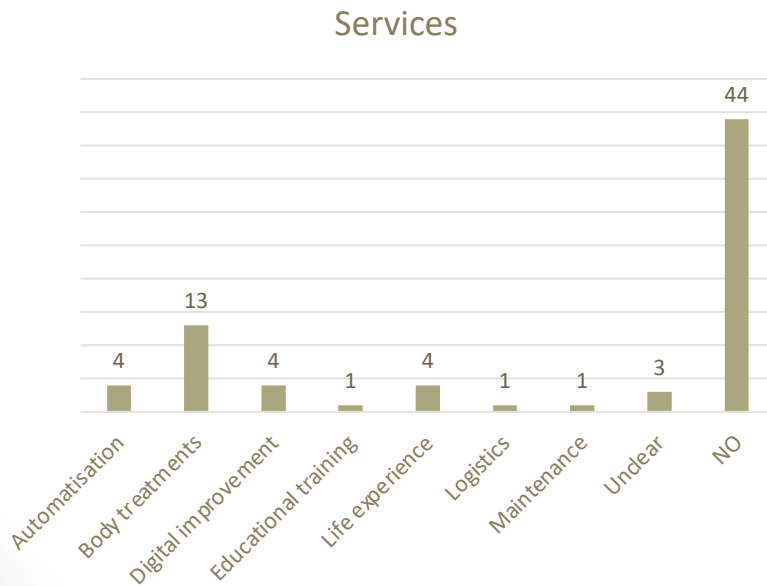
Metodologia: interviste ad imprenditori migranti sulle loro esperienza lavorativa e sulle loro reti sociali, private e professionali. Campione: 70 imprenditori immigrati registrati alla camera di commercio di Brescia.

Risultati: Il contesto locale di Brescia attrae imprenditori immigrati e offre opportunità di innovazione. Gli imprenditori utilizzano la loro nazionalità come strategia di marketing. Le connessioni lavorative consistono, in media, in gruppi di 4 persone che sono simili in termini di provenienza, livello di educazione e genere.

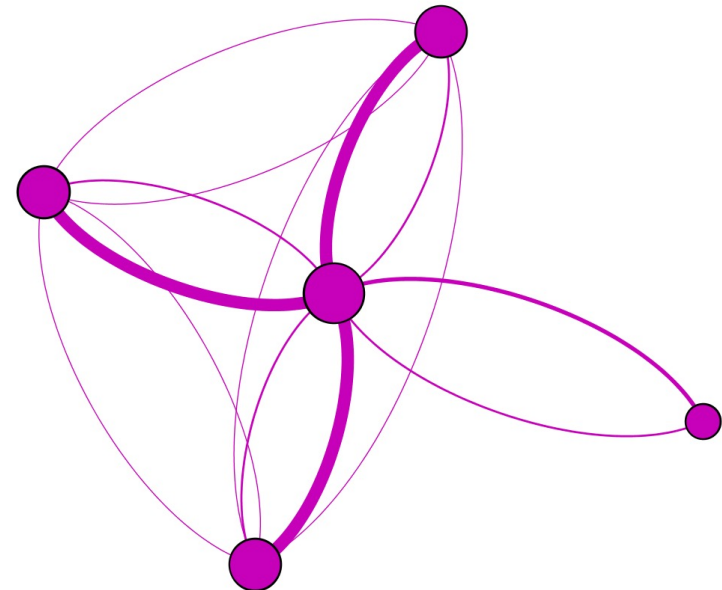
Implicazioni: Alcuni imprenditori migranti usano il loro background (cultura, linguaggio, conoscenze) come fonte di nuove idee per il business. Ad ogni modo, per entrare nel contesto di mercato di Brescia, per loro sono necessari numerosi adattamenti.

Innovativeness based on

- the use of cultural factors, such as providing a new experience;
- technological improvements, for example machines or digital tools.
- beauty treatments adapted to specific targets



Representation of an average business network with similar, interconnected people



GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

Members

Solidarietà e relazioni lavorative. Il caso di Talent Garden Brescia

Federico Bianchi
Flaminio Squazzoni
Niccolò Casnici

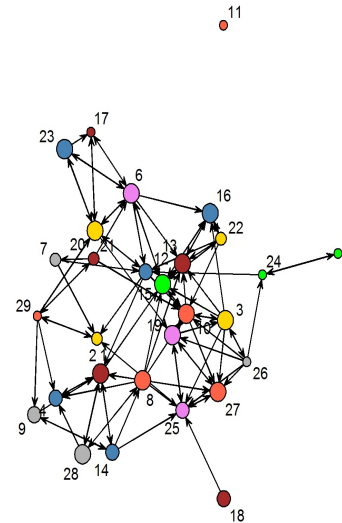
Punti chiave del progetto

In breve: come relazioni di supporto sociale emergono in contesti di business privi gerarchia aziendale?

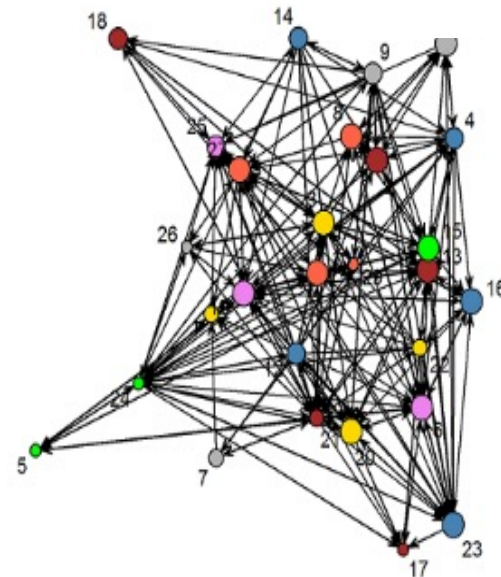
Metodologia: interviste agli abitanti di Talent Garden Brescia. Questionari sociometrici. Network Analysis (ERG models).

Risultati: la fiducia personale ha un ruolo fondamentale nell'emersione delle relazioni di supporto sociale. Collaborare con successo è una condizione necessaria ma non sufficiente per sviluppare relazioni di solidarietà personale.

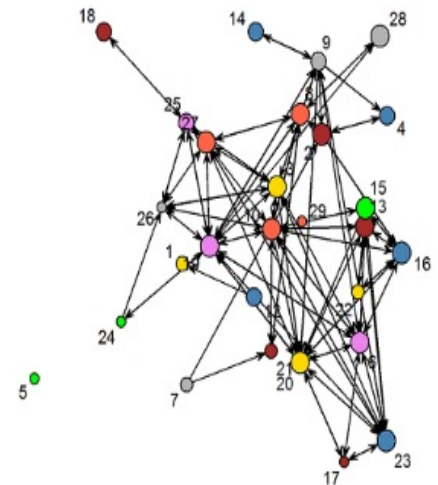
Social Support



Trust in business



Positive Collaboration



GECS Research Group on Experimental and Computational Sociology

[HOME](#) | [RESEARCH PROJECTS](#) | [VISITING SCHOLARS](#) | [PUBLICATIONS](#) | [COLLEAGUES](#) | [LECTURES](#) | [CONTACTS](#)



GECS

GECS - Research Group on Experimental and Computational Sociology aims to integrate computational and experimental research to explain complex social and economic phenomena, such as markets, inter-organisational networks and societal transitions. Formally established in 2007 at the University of Brescia, it aims to promote innovative interdisciplinary research in economics and sociology by exploiting the advantage of modelling, computer simulation, and laboratory experiments.

GECS operates through personal collaboration, common participation in research projects, and the organisation of scientific events. It is active in training and education initiatives addressed to young scholars. It regularly hosts PhD. students and Post-Doc for jointed research projects.

Members

Anziani In-Rete. L'impatto delle reti sociali sulla decadimento cognitivo nella città di Brescia

**Niccolò Casnici
Flaminio Squazzoni
Alessandra Marengoni
Marco Tononi**

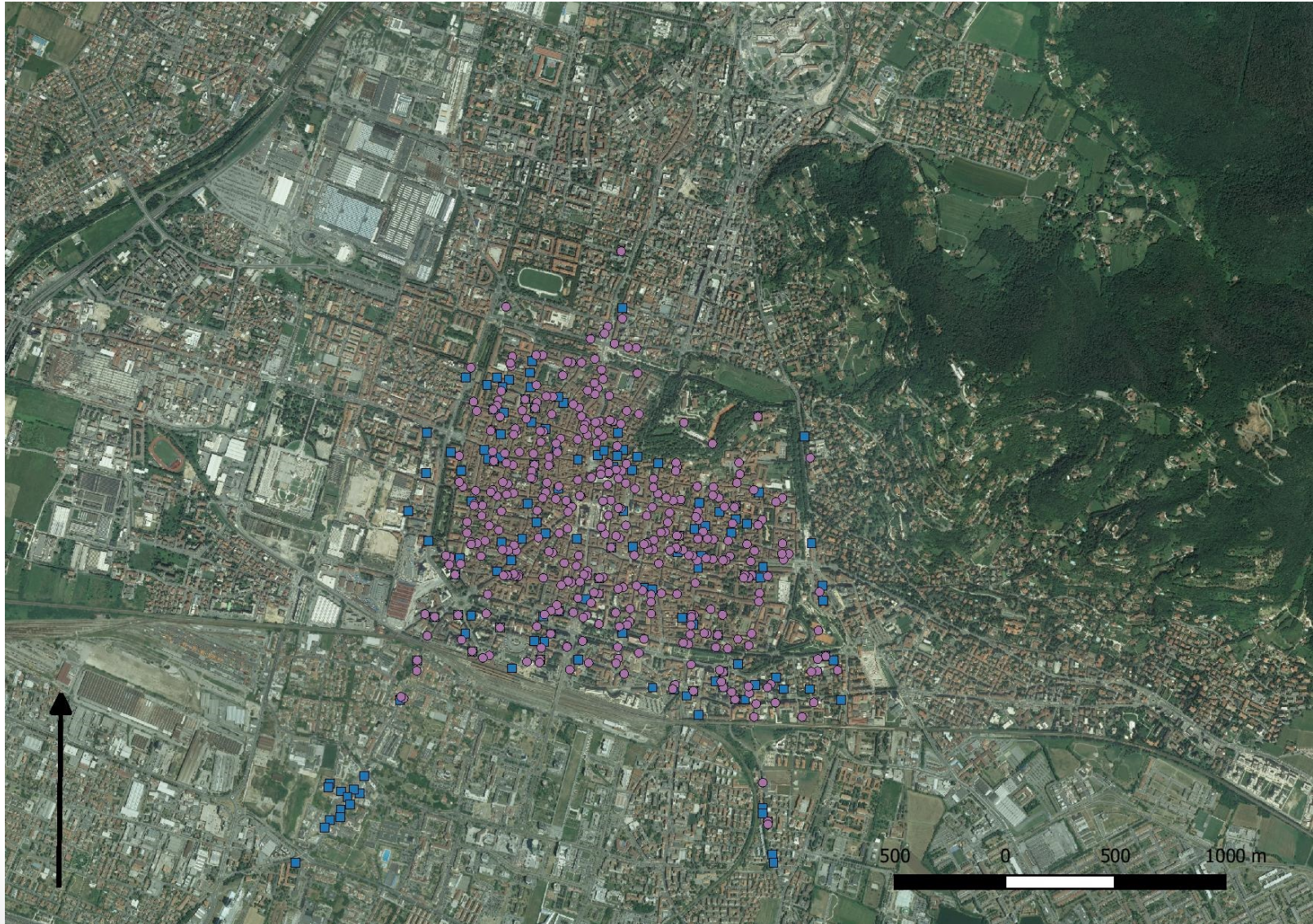
Punti chiave del progetto

In breve: come le relazioni sociali e il contesto urbano influiscono sul decadimento cognitivo?

Metodologia: interviste su 400 anziani residenti nel centro storico di Brescia. Questionario sociometrico. Network Analysis. Geografic Information System.

Risultati: La dimensione delle reti sociali personali degli anziani ha un effetto protettivo nei confronti del decadimento cognitivo. Anche il numero di associazioni non profit nel vicinato influisce positivamente sul decadimento cognitivo.

Implicazioni: una politica di incentivazione delle relazioni sociali personali e della partecipazione in attività culturali e di volontariato può avere nel medio-lungo periodo un forte impatto su qualità di vita e salute pubblica.



NEW FRONTIERS OF PEER REVIEW



PEERE New frontiers of peer review is a COST Action running from 12/05/2014 to 11/05/2018. It includes 26 countries and 60 participants

Flaminio Squazzoni

Federico Bianchi

Niccolò Casnici

Francesco Grimaldo

New Frontiers of Peer Review



Highlights of the project

- This Action aims to improve efficiency, transparency and accountability of peer review through a trans-disciplinary, cross-sectorial collaboration.
- The objectives of this Action are:
 - (i) to analyse peer review in different scientific areas by integrating quantitative and qualitative research and incorporating recent experimental and computational findings;
 - (ii) to evaluate implications of different models of peer review and to explore new incentive structures, rules and measures to improve collaboration in all stages of the peer review process;
 - (iii) to involve science stakeholders in data sharing and testing initiatives,
 - (iv) to define collaboratively a joint research agenda that points to an evidence-based peer review reform.

Working Groups

WG 1: Theory, analysis and models of peer review

WG1 leader: Prof Stephen COWLEY (University of Southern Denmark, Denmark)

WG1 vice-leader: Mario MALICKI (University of Split School of Medicine, Croatia)

The main objective of this group will be to analyse peer review in various fields.

WG 2: Data sharing and testing

WG2 leader: Prof Ana MARUSIC (University of Split, School of Medicine, Croatia)

WG2 vice-leader: Dr Kalpana SHANKAR (University College Dublin, Ireland)

The main objective of this group will be to establish standards to promote and manage data sharing among stakeholders and testing initiatives.

WG 3: Research and Implementation Agenda

WG3 leader: Prof Elise BREZIS (Bar-Ilan University, Tel Aviv, Israel)

WG3 vice-leader: Prof Petra AHRWEILER (Europäische Akademie, Bad Neuenahr-Ahrweiler, Germany)

The main objective of this group will be to define a joint research agenda and inspire implementation activities.

❖ “Artificial intelligence in peer review: How can evolutionary computation support journal editors?” by Maciej J. Mrowinski, Piotr Fronczak, Agata Fronczak, Marcel Ausloos and Olgica Nedic has been recently published in PLoS ONE.

❖ “Duration and quality of the peer review process: the author’s perspective” by Janine Huisman & Jeroen Smits (Radboud University, Nijmegen, The Netherlands), which was originally presented at a PEERE workshop, has been recently published in Scientometrics. The article is open access here. Abstract. To gain insight into the duration and quality of the scientific peer review process, we analyzed data from 3500 review experiences submitted by authors to the SciRev.sc...

❖ “Does single blind peer review hinder newcomers?” by Marco Seeber (Ghent University, Belgium) and Alberto Bacchelli (Delft University, Netherlands) has been published in the online version of Scientometrics. The article will be included in the special issue on “Scientometrics of peer review” that includes many articles originally presented at PEERE meetings and co-authored by PEERE members.

❖ “Post retraction citations in context: a case study” by Judit Bar-Ilan (Bar-Ilan University, Israel) and Karoly Takacs (Icahn School of Medicine at Mount Sinai, New York, USA) has been published in the online version of Scientometrics. The article will be included in the special issue on “Scientometrics of peer review” that includes many articles originally presented at PEERE meetings and co-authored by PEERE members.

❖ “The miracle of peer review and development in science: an agent-based model” by Simone Righi (University of Bologna, Italy) and Karoly Takacs (Hungarian Academy of Sciences, Budapest, Hungary) has been published in the online version of Scientometrics. The article will be included in the special issue on “Scientometrics of peer review” that includes many articles originally presented at PEERE meetings and co-authored by PEERE members

❖ “Assessing peer review by gauging the fate of rejected manuscripts: the case of the Journal of Artificial Societies and Social Simulation” by Niccolò Casnici, Francisco Grimaldo, Pierpaolo Dondio, Nigel Gilbert and Flaminio Squazzoni has been published in Scientometrics on 03 March 2017.

FOR MORE INFORMATION PLEASE TAKE A LOOK AT <http://www.peere.org/category/publications/>

9667 nodes
30842 edges

