

ZHENG WANG

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EDUCATION

European University Institute

2017 – present

PhD Candidate in Economics

Italy

Thesis title: *Essays in the Economics and Econometrics of Networks and Peer Effect*

Supervisors: Andrea Ichino & Sule Alan

Expected completion date: May 2023

Aix-Marseille School of Economics

2021 – present

Visiting PhD researcher

France

Mentor: Prof. Yann Bramoullé

London School of Economics

2013 – 2014

MSc in Econometrics and Mathematical Economics (EME)

UK

Beihang University

2009 – 2013

BSc in Finance, with second degree in Applied Mathematics

China

RESEARCH INTERESTS

Primary Fields: Applied Econometrics, Causal Inference, Applied Microeconomics

Secondary Fields: Networks, Peer Effects, Education, Social Mobility, Discrimination, Crimes

REFERENCES

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European University Institute

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JOB MARKET PAPER

The Linking Effect: Causal Identification and Estimation of the Effect of Peer Relationship

The endogeneity of network formation has been a major obstacle to the empirical study of peer influence for many important types of networks, including friendship networks, buyer-supplier networks, banking networks, etc. This paper puts forward the first identification strategy in a causal framework to study the effect of non-randomly formed peer relationships. It reveals the minimum set of assumptions needed for causal identification, which, unlike existing approaches, needs neither a network formation model nor an outcome model to be parametrically specified. I show that this is because the propensity scores of the unobserved confounders can be non-parametrically identified and estimated from the distribution of network links. Using the proposed method, I empirically estimate the causal effect of high school friendships on students' bachelor's degree attainment. While previous literature finds that being exposed to more high-achieving boys in high school makes girls less likely to obtain a bachelor's degree, I show that this is not true when these high-achieving boys are considered friends by the girls. In fact, one additional high-achieving male friend increases the probability that a female student graduates from college by 3 p.p. Further analysis suggests that this positive influence is not a result of increased academic ability but rather a significant confidence boost. These results imply that instead of shielding girls from high-achieving boys, it could be more effective to foster friendly interactions among them.

WORK IN PROGRESS – Econometrics

The Perils of Pairwise Peer Effect

Joint with Yann Bramoullé and Pierre-Philippe Combes

Pairwise regressions have been increasingly more commonly used to study peer influence, noticeably after the influential paper by Bayer, Ross and Topa (2008). In this paper we show both the identification and inference issues coming from pairwise regressions.

WORK IN PROGRESS – Applied Microeconomics

Can women be more competitive than men? Evidence from Duolingo

This paper examines the differential effects of competition difficulty on men and women when the competition does not involve face-to-face confrontation, and effort is the only determinant of the final ranking. I investigate this in the setting of Duolingo, a free online foreign-language learning platform with over 300 million users. Every week, language learners on Duolingo are randomly allocated to groups of 30 people to compete on the number of language lessons completed during that week. While people within the same competition group could track each other's performance, they have no means of communicating with one another. Interestingly, I find that when faced with tougher competitors who have a track record of higher performance, women become tougher competitors themselves by putting in more effort in the competition. At the same time, men don't seem to respond the same way.

Experiment on Test Performance and Implications for Fairness

Joint with Dalila Figueiredo

Ongoing pilot. Details available upon request.

Victimization and Crime Overlap

Joint with Christian Dustmann, Rasmus Landersø and Mikkel Mertz

Using Danish administrative data, we study whether and how different aspects of victimization causally affect the future criminal activities of the victims.

TEACHING EXPERIENCE

Econometrics and Statistics I (Causality)	Fall 2019
<i>EUI PhD Core Course, TA to Prof. Andrea Ichino</i>	
Econometrics and Statistics II (Microeconometrics)	Spring 2018
<i>EUI PhD Core Course, TA to Prof. Michèle Belot</i>	

WORK EXPERIENCE

Research assistant for Prof. Andrea Ichino	2018
<i>European University Institute</i>	
Junior Economist	2016 – 2017
<i>Research Department, International Labor Organization (Geneva)</i>	
Research Intern	2015 – 2016
<i>Research Department, International Labor Organization (Geneva)</i>	
Data Analyst Intern	2015
<i>International Federation of Red Cross and Red Crescent Societies (Geneva)</i>	

ADDITIONAL COURSEWORK

Summer School on The Economics of Networks	2021
<i>Lori A. Beaman, Sanjeev Goyal, Yann Bramoullé & Habiba Djebbari</i>	France
Summer School on The Econometrics of Peer Effects and Social Interactions	2019
<i>Bryan Graham & Aureo de Paula</i>	Germany

CONFERENCES AND SEMINARS

2nd International Econometrics PhD Conference	November 2022
<i>The Econometric Institute (EI) at Erasmus University Rotterdam</i>	
PhD-EVS online seminar	October 2022
<i>International online seminar for PhD candidates and early career researchers</i>	

GRANTS AND AWARDS

4th year PhD Grant	2021 – 2022
<i>Aix-Marseille School of Economics</i>	France
EUI Special PhD Grant – Adam Smith	2017 – 2021
<i>European University Institute</i>	Italy

Languages

English (fluent), Mandarin (native), French (basic)
R, Python, MATLAB, Stata