ZHENG WANG

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EDUCATION

European University Institute 2018 - presentPhD 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: Yann Bramoullé **European University Institute** 2017 - 2018MRes in Economics Italy **London School of Economics** 2013 - 2014MSc in Econometrics and Mathematical Economics (EME) UK 2009 - 2013Beihang University 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, Inequality, Gender, Crimes

REFERENCES

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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 study of peer influence. This paper proposes a causal identification solution in the potential outcome framework. Combining results from multiple causal inference and statistical network analysis, I show that confounding can be addressed by inferring propensity scores of network link formation from the adjacency matrix. This identification strategy imposes minimum restrictions on the data-generating process and, unlike existing econometric solutions, does not rely on any parametric modelling. As an application, I estimate the effect of high school friendships on bachelor's degree attainment. While previous literature finds that exposure to more high-achieving boys makes girls less likely to obtain a bachelor's degree, I show that if the girls consider the boys as friends, their interactions induce a positive impact instead. Since friendship endogeneity has been addressed, the estimated effect is causal.

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.

The Effect of Familiarity on Test Performance and its Implications on Fairness Joint with Dalila Figueiredo

In this paper, we design and conduct an experiment to examine whether students' familiarity with test topics used in IELTS, a standardised English test commonly used for college admission, affects their test performance. Then, with a survey, we investigate whether familiarity disparities across groups lead to unfair examinations for students of different genders, cultures, and socioeconomic status.

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 III (Microeconometrics) Spring 2018 EUI PhD Core Course, TA to Prof. Michèle Belot WORK EXPERIENCE Research assistant for Prof. Andrea Ichino 2018 European University Institute 2016 - 2017Junior Economist Research Department, International Labor Organization (Geneva) Research Intern 2015 - 2016Research Department, International Labor Organization (Geneva) Data Analyst Intern 2015 International Federation of Red Cross and Red Crescent Societies (Geneva) ADDITIONAL COURSEWORK Summer School on The Economics of Networks 2021 Lori A. Beaman, Sanjeev Goyal, Yann Bramoullé & Habiba Djebbari France Summer School on The Econometrics of Peer Effects and Social Interactions 2019 Bryan Graham & Aureo de Paula Germany CONFERENCES AND SEMINARS November 2022 2nd International Econometrics PhD Conference

GRANTS AND AWARDS

PhD-EVS online seminar

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

October 2022

Languages

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

The Econometric Institute (EI) at Erasmus University Rotterdam

International online seminar for PhD candidates and early career researchers