

HABILITATION THESIS REVIEWER'S REPORT

Masaryk University

Applicant

Luca Fumarco

Habilitation thesis

Demographic Characteristics as Drivers of Inequality

Reviewer

Andrew E. Clark, Ph.D.

Reviewer's home unit, institution

Paris School of Economics

The thesis presented by Luca Fumarco covers the areas of discrimination in access to mental health care by ethnicity and gender identity, and relative age effects on the social networks and well-being of younger individuals.

The four journal articles attached to this thesis have all been published in good journals that appear in the Web of Science, and Dr Fumarco is corresponding author for two of them. His CV lists around 20 journal articles in total (all of these are in the Web of Science as well, I believe). This is more than respectable.

He has used a variety of methods in his published work. Probably his main topic is the effect of relative age on a variety of outcomes (including diet, sport success, labour-market outcomes more generally, and health and well-being). Here the approach is the analysis of survey data, with the use of instrumental variables when required (as relative age can be endogenous, if worse-performing children are not allowed to proceed to the next academic year). The second main area of work is discrimination, and here a correspondence audit approach is taken, with messages sent by fictitious individuals requesting health appointments. I should last mention the contribution to the public good via Stata ado files, two of which have been the subject of publication in the *Stata Journal*.

The overall quality of his work is very good. The journals in which he has published are towards the top of the ranking in Economics. One new paper is in the *Economics of Education Review*, which is the top field journal in Education Economics. I also note that he has two papers in various stages of revision at the *Journal of Economic Literature*, which is a very high profile outlet. His CV bears reference to a sustained and high-level research output.

His work has also attracted academic attention. Google Scholar lists around 700 citations, with an h-index of 13. In the more-restrictive Social Science Citation Index these figures are 300 and 10.

I am overall favourably impressed by the quantity and quality of Dr Fumarco's work, which compares well with dossiers that I have seen at comparable stages in the individual's career, and believe that it fulfils the requirements of this Habilitation.

Reviewer's questions for the habilitation thesis defence:

- 1) What are the normative implications of relative age? Should we always have classes of students who were born within a few months of each other?
- 2) Is it the distance to the oldest student in the class that matters, or rather the distance to the oldest five, or the gap from mean age in the class?
- 3) Being amongst the youngest students in a class is disadvantageous, which makes me wonder why some parents are anxious for their children to skip a grade.
- 4) You show that younger children in a given class do worse, but could it be the case that classes with a wider range do better on average (this would be the class fixed effect). The idea here is that a student who is eight months (say) younger than the oldest student will do worse than the oldest student, but the whole class could perform better than a class in which all students are exactly the same age: here the "disadvantaged" student in the first class may actually have better outcomes than the homogeneous students in the second class.
- 5) You find an effect of relative age on life satisfaction, and on social networks, health, BMI etc. Could you carry out a mediation analysis to see how much of the life satisfaction effect is explained by the social network, health, BMI and other variables?
- 6) Could you have sent more than one application letter to each MHP, so that you could include MHP fixed effects?
- 7) You find no evidence of discrimination against TNB applicants overall, and positive discrimination in favour of White TNB applicants. This may surprise some people: What were your hypotheses before carrying out the experiment?
- 8) I wondered whether the applications were balanced by city size. Maybe mental health services are more stretched in cities, and cities have more ethnic minority/TNB applicants.
- 9) It sounds as though one piece of advice regarding ethnicity would for it to be hidden in the application process. But have there been analyses of discrimination in the post-appointment phase of treatment?
- 10) Any difference in response rates could reflect discrimination, or potentially differences in treatments. Are mental health services that are received by TNB patients any different to those received by cisgender patients? How are these reimbursed: Is there

any sense in which some gender-identity/ethnic group might be more “profitable” than another?

11) What is the rationale for using daily cases and deaths in the Covid analysis, but weekly excess deaths? Longer time periods might provide a better fit to the data.

Conclusion

The habilitation thesis entitled *Demographic Characteristics as Drivers of Inequality* by Luca Fumarco **fulfils** the requirements expected of a habilitation thesis in the field of Economics.

Date: December 31st 2025

Signature: