

The investigation of social mechanisms reproducing educational inequalities

Mutual lessons for quantitative sociologists and counterfactual policy evaluators, from two Italian randomized controlled trials

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A key theme of quantitative sociological research is inequality in education, a process playing a crucial role in the intergenerational reproduction of social structure. In recent decades, the focus of studies in this field has been shifting from the general picture at macro level to the investigation of social mechanisms at micro level. This shift is extremely challenging for quantitative sociologists. Indeed, the rigorous identification of causal effects underlying social mechanism is extremely hard to gain, using the traditional techniques of quantitative sociological research, such as multivariate regression or structural equations modelling. The problems of omitted variables bias and of bidirectional causality are overwhelming in this strand of quantitative studies and the estimates of robust associations could not be straightforwardly interpreted as causal impacts. In other terms, high uncertainty affects all the mechanisms empirically tested in order to explain the causal chain between parental social background and student performance in education. Broadly speaking, it seems that moving from macro-level scenario to micro-level descriptions and the consequent policy implications is a challenge raising all the weaknesses of traditional sociological quantitative research.

In this paper, we suggest that an alliance between quantitative sociologists and counterfactual policy evaluators would be mutually useful for the development of both disciplines. More precisely, in the first part of the paper, we argue that policy evaluation is a valuable source of casual evidence, shading light on mechanisms underlying social inequalities in education. This idea is not new in sociological thinking, since Goldthorpe (2004) suggested several years ago that cameral sociology could be used in order to investigate micro-level social mechanisms. We present two evaluation studies, currently being published, reframing their results within a sociological perspective. Both interventions are focused on parents: the first improved their involvement on school issues through Family Group Conferences (Barbetta et al 2015), the second provided them information about school tracking and returns to education (Barone et al 2016).

In both cases, national research groups designed the intervention and assessed its impact through Randomized Controlled Trials. The use of Randomized Controlled Trials is particularly interesting for sociological research, because this tool, among others, is the most rigorous in order to develop causal claims (Gerber and Green 2012). Nonetheless and despite the urge of rigorously investigating casual impacts of social mechanism, Randomized Controlled Trials are a research tool still under-used by sociologists (Jackson and Cox 2013), but they are rapidly growing in educational research (in example, see the websites of *What Works Clearing House* and of the *Education Endowment foundation*, listed in the references), even in Italy (Argentin 2016).

The first trial showed that Family Group Conferences are effective in increasing parental involvement and improving the relations between students and their parents and students and their teachers; nonetheless the increased relational well-being does not translate in higher school achievement for treated students. The second trial showed that providing information about the benefits deriving from an academic upper secondary track increases the enrolment of students from lower social backgrounds with high education performance. Beyond the policy evaluation framework, these studies are relevant for sociological research,

since they causally explore the role of parental involvement and parental information in defining their children's educational pathways.

In the second part of the paper, we exploit a feature characterizing the two randomized controlled trials described above. Indeed, in both studies, randomized controlled trials are nested within surveys (RCTNWS). With this, we mean that data were collected not only on the randomized subpopulation but on a wider sample of students containing the randomized ones.

We argue that RCTNWSs are an opportunity for sociological research and that they allow sociologists to integrate counterfactual policy evaluation with a broader focus on inequality. More precisely, we argue that, thanks to the situation of RCTNWS, it is possible to go beyond the narrow focus on effectiveness proper of counterfactual policy evaluation. Indeed, we can integrate estimates of effectiveness with a rigorous evaluation of the intervention's contribution to the reduction of social inequalities. A measure of this new evaluation dimension is computed for both the presented RCTs.

We finally develop considerations about the link existing, for a single intervention, among its effectiveness, its targeting and its contribution to inequality reduction. A simulation tool is used, in order to illustrate the implications of this new evaluation dimension, shedding light about the difficulties existing in reducing social inequalities, when designing new interventions.

References

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Education Endowment Foundation at <https://educationendowmentfoundation.org.uk/>

What Works Clearinghouse at <http://ies.ed.gov/ncee/wwc/>