American Journal of Epidemiology Submitted Manuscript

Title: Response to the commentary by Rojas-Saunero et al.

Authors: Emilie Courtin, Peter Muennig

Correspondence Address: Correspondance to Dr Emilie Courtin, London School of

Hygiene and Tropical Medicine, 15-17 Tavistock Pl, London WC1H 9SH. Email:

emilie.courtin@lshtm.ac.uk

Affiliations: London School of Hygiene and Tropical Medicine, Faculty of Public Health and

Policy (Emilie Courtin); Columbia University, Mailman School of Public Health (Peter

Muennig)

Funding: This work was funded by the National Institute on Aging (Grant No.

R01AG054466) and Medical Research Council (Grant No. MR/T032499/1)

Data Availability Statement: Not applicable

Thanks: Not applicable

Conference presentation: Not applicable

Preprint Information: Not applicable

Disclaimer: The views expressed in this article are those of the authors and do not reflect those of the National Institutes of Health or the Medical Research Council.

Conflict of Interest: None to report

© The Author(s) 2022. Published by Oxford University Press on behalf of the Johns Hopkins Bloomberg School of Public Health. All rights reserved. For permissions, please e-mail: journals.permissions@oup.com.

Running Head:

Key words:

Abbreviations:

We thank Rojas-Saunero and colleagues for their commentary on our article (1), which assessed the mental health effects of expanding earned income tax credits EITC for low income Americans without dependent children thanks to a randomized-controlled trial (RCT) (2). We agree that evaluating the health effects of experimental social interventions presents challenges that extend beyond those of, for example, drug trials.

As Rojas-Saunero and colleagues point out, follow up was 69% at three years into our study, so we do not know how the other 31% of participants would have responded to validated survey estimates. Provided that there is no differential attrition, it is not heroic to assume that treatment effects were observed at random. Linkages to administrative data can both fill in these gaps for trials in progress, and can also be used to assess the long-term impacts of trials conducted in the past (3). The US' unique history in conducting social policy RCTs since the 1960's is actually a treasure trove for social epidemiologists interested in assessing the long-term effects of social policy interventions, and administrative data offer superior follow up to most clinical trials. Mortality data is one example of administrative data that can be linked to older trials, providing of course that the original identifiers can be found and that the consent process allows for the linkage.

Rojas-Saunero also point to problems that pose even more serious challenges to study validity, while also overlooking others. For example, they point out that social policy experiments are usually not blinded. In practice, it common for participants to be informed of the treatment and control conditions. This allows them to guess their treatment assignment.

We also agree with the authors on the importance of thinking of alternative protocols and joint interventions from the start of the interventions. In practice, this will prove challenging. Health researchers often piggy-back on existing RCTs, which are run for the purpose of assessing the socio-economic impact of the intervention (4). Historically, health outcomes have been an afterthought in most of the social experimentation literature rather than the measure of interest (4). As national health budgets balloon, there are growing calls to consider health effects of social policy interventions in the cost-effectiveness evaluation of costly welfare policies (5). This field is in its infancy, and many more interdisciplinary studies need to be conducted and planned with health experts for the ambitious program outlined by Rojas-Saunero and colleagues to come to life.

Experimental studies of social policies are certainly no panacea. However, they do play a critical role in providing policymakers with additional causal data that compliment observational and quasi-experimental studies. It cannot be over-emphasized that, until recently, there was considerable debate surrounding whether income can produce health, let alone whether it is possible to improve the health of low-income adults with a social policy intervention.(6) Some of the suggestions by Rojas-Saunero and colleagues can be implemented immediately, and we will certainly do so ourselves in ongoing and future work. It is important, though, not to make perfect to be the enemy of good because it is not possible to make informed policy decisions without reasonable certainty that large taxpayer investments will reasonably produce health and economic impacts.

References

1. Rojas-Saureno P, Labrecque JA, Swanson SA. Conducting and emulating trials to study effects of social interventions. American journal of epidemiology. 2022.

 Courtin E, Allen HL, Katz LF, Miller C, Aloisi K, Muennig PA. Effect of Expanding the Earned Income Tax Credit to Americans without Dependent Children on Psychological Distress (Paycheck Plus): a Randomized Controlled Trial. American journal of epidemiology. 2021:kwab164.

3. Muennig P, Johnson G, Wilde ET. The effect of small class sizes on mortality through age 29 years: evidence from a multicenter randomized controlled trial. American journal of epidemiology. 2011;173(12):1468-74.

4. Courtin E, Kim S, Song S, Yu W, Muennig P. Can Social Policies Improve Health? A Systematic Review and Meta-Analysis of 38 Randomized Trials. Milbank Q. 2020;98(2):297-371.

5. Sparer MS, Brown L, Muennig PA. (Re) Defining the Health Care Delivery System: The Role of Social Services. Available online at: <u>http://www.kpmg-institutes.com/institutes/government-institute/articles/2016/05/-re--defining-the-healthcare-delivery-system--the-role-of-social.html</u> Acessed 5/18/18. 2016.

6. Muennig P. Health selection vs. causation in the income gradient: what can we learn from graphical trends? Journal of health care for the poor and underserved. 2008;19(2):574-9.