



Commentary

A commentary on “The trouble with trust: Time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries”

Martin Lindström

Social Medicine and Health Policy, Department of Clinical Sciences in Malmö, Lund University, S-205 02, Malmö, Sweden

ARTICLE INFO

Keywords

Covid-19
 Pandemic
 Infectious diseases
 Gini index
 Social capital
 Trust
 Institutional trust
 Sweden

ABSTRACT

This study investigates associations between central aspects of social capital (social trust, group affiliations, civic engagement, confidence in state institutions), income inequality (Gini index for income), and COVID-19 mortality in 84 countries included in different time waves of the World Values Survey (WVS) (Elgar et al., 2020). Comments: First, infectious diseases are either patterned according to socioeconomic status (SES), determined by e.g. habitus, nutrition and crowded housing or clustering, or not according to SES. Second, the focus on economic inequality measured as income inequality (Gini index) should be complemented with measures of wealth inequality (Gini index for wealth), following the globalization process with tax exempted multinational companies. Third, the aspects of social capital were measured in different time waves of the World Values Survey (WVS) for different countries, which is a weakness because trust and other aspects of social capital vary over time and depend on specific events and social and economic trends.

Commentary

This study investigates associations between central aspects of social capital (social trust, group affiliations, civic engagement, confidence in state institutions), income inequality (measured as Gini index for income), and COVID-19 mortality in 84 countries included in different time waves of the World Values Survey (WVS) (Elgar et al., 2020). The most recent data from the WVS for each country was used including cycle 7 (2017–2020) for 44 countries, cycle 6 (2010–2014) for 27 countries and cycle 5 (2005–2009) for 7 countries. The results suggest that more economically unequal countries and countries with lower levels of some dimensions of social capital including civic engagement and confidence in state institutions displayed a higher COVID-19 mortality. In contrast, countries with lower levels of social trust and group affiliations scored lower COVID-19 mortality. It may be noted that the number of countries with data from WVS time cycles 5–7 adds up to 78, not 84.

Research regarding associations and causal pathways between social capital and income inequality, and infectious diseases is scarce. The COVID-19 pandemic may put more focus on this to some extent scarcely investigated research area.

Some but not all infectious diseases are strongly patterned according to socioeconomic status (SES), with higher incidence and mortality in

social strata with lower SES. The authors make the general statement in the introduction that “relative income differences within societies also shape social patterns in infectious disease”. This statement is only true for some or even many infectious diseases, but not for all. Historically, SES differences in mortality were smaller or even absent in western and other societies. The major reason seems to have been that a number of airborne infectious diseases with a rapid spread across major parts of society as well as some other infectious diseases were independent of socioeconomic circumstances such as e.g. poor nutrition and crowded housing conditions or other sources of SES-patterned distributions. In the 18th and early 19th centuries, Scania in the southernmost part of Sweden experienced fifteen major epidemic outbreaks. Ten of them were clearly caused by smallpox, and still another two epidemics which occurred in the early 18th century (1708 and 1724) were also most likely caused by smallpox. The remaining three epidemics were caused by whooping cough. Smallpox is an example of an infectious disease which killed independently of individual habitus, nutrition and other socioeconomic circumstances (Bengtsson and Lindström, 2000, 2003). In fact, the royal families of Europe seem to have been more afflicted than the general population in the 18th century. In contrast, other infectious diseases such as tuberculosis have always been clearly patterned according to SES. The incidence of respiratory tuberculosis strongly depends on habitus, nutrition and crowded housing conditions.

DOI of original article: <https://doi.org/10.1016/j.socscimed.2020.113365>.

E-mail addresses: martin.lindstrom@med.lu.se, martin.lindstrom@med.lu.se.

<https://doi.org/10.1016/j.socscimed.2020.113386>

Accepted 19 September 2020

Available online 3 October 2020

0277-9536/© 2020 Elsevier Ltd. All rights reserved.

Respiratory tuberculosis mortality continually declined in England and Wales during the 19th and first part of the 20th century until the mid-century, probably for reasons of improved nutrition and housing conditions. When treatment and vaccination became available in mid-20th century, most of the mortality decline had already occurred (McKeown, 1979). Ironically, the Swedish strategy to handle the COVID-19 pandemic, which included loose restrictions (and no lockdown) and a high belief in individual responsibility compared to other European countries, was based on the assumption of a rapid spread of the disease following the pattern of some airborne infectious diseases such as influenza and (historically) smallpox, a belief in the need to slow down the spread in order not put a too heavy burden on the healthcare system, and a belief in the possibility to achieve herd immunity, although the achievement of herd immunity was never an official part of the strategy (Lindström, 2020a). Instead, the spread of the COVID-19 pandemic occurred in apparently clustered patterns with higher incidence and consequent mortality in population strata with lower SES and ethnic minority background. This erroneous assumption by the Swedish government and the public health agency means that comparatively very loose restrictions to handle the COVID-19 pandemic were imposed by a Socialist government, which resulted in a high death toll in COVID-19 which was patterned according to SES with higher deaths tolls among groups with lower SES and some ethnic minorities.

The Gini index for income is commonly used in the public health literature to measure and analyze economic inequality. Leading scholars such as Wilkinson (1996), Wilkinson and Pickett (2009), and Marmot (2016) have discussed income inequality to illustrate and analyze economic inequality in different countries. However, it is becoming increasingly clear that income inequality is only one aspect of economic inequality. The Luxembourg Wealth Study reported by Sieminska et al. (2006) may serve as an illustration. In 2002/2003, Sweden had an approximate Gini index 26 for income, which suggests low income inequality. This would of course be expected given the renowned Swedish welfare state financed by high income taxes in order to accomplish economic redistribution in order to finance an extensive general social welfare system. However, in the Luxembourg Wealth Study the calculation of Gini index for wealth in Sweden showed a completely different pattern both domestically and in international comparison. The Gini index for wealth was 89 in Sweden already in 2002/2003, compared to 84 in the USA. The reason for this very high Gini index for wealth in Sweden compared to the USA was not to be found in the higher part of the wealth spectrum but in its lower part. Some 32% of the population in Sweden had no economic assets or net negative economic assets, compared to 23% in the USA, 23% in Canada, 17% in Finland and 10% in Italy. A major part of the working population in Sweden was so heavily taxed that it had no opportunity to accumulate any positive financial assets at all. Despite later tax reforms for the working population, the problem of a proportionally and numerically diminished middle class has increased throughout the West, and the squeezing of the middle class by the parallel process of an increase in the proportion of both the wealthy and the poor (with no economic assets) has recently proceeded particularly far in Sweden, according to a recent report from the OECD (OECD, 2019). These economic and social processes in the West may be a factor contributing to the recent rise in populism. In Sweden in early 2017, the Social Democratic-led government e.g. granted in effect an energy tax exemption for the largest global social media companies. Their extremely energy consuming server halls recently installed in Sweden now pay 80 times (!) lower energy tax than the Swedish public and other companies (Lindström, 2020b). It seems that much of the academic discussion regarding income inequality is increasingly becoming a diversion away from the true sources of economic inequality in most of the West in general and in Sweden in particular. In the future, more focus should be put on the effects of globalization, the economic privileges of international companies and the wealth distribution resulting from these particular processes.

The authors' use of the term "inequality" instead of "inequity" seems

appropriate. The Gini index probably measures aspects of economic inequality, which may be the sum of income differences which may be regarded as either fair or unfair.

The study's ecological study design which focuses on entire countries seems highly appropriate, given the contextual nature of both the Gini index and the major governmental and national level responsibility to handle the COVID-19 pandemic. The risk of ecological fallacy (Schwartz, 1994; Diex-Roux, 1998) seems to be small even for the measures of social capital included in the study. The associations between social trust and group affiliations, and COVID-19 mortality plausibly illustrates the fact that aspects of social capital may have adverse effects on some aspects of health (Martins et al., 2017).

The study includes WVS data from different time cycles for different countries for reasons of availability depending on the most recent participation in the WVS. Social capital data from cycle 7 (2017–2020) were included for 44 countries, data from cycle 6 (2010–2014) for 27 countries and data from cycle 5 (2005–2009) for 7 countries. This means that in the same study aspects of social capital such as social trust, group affiliations, civic engagement and confidence in state institutions are measured at different points in time or even different periods of time for different countries. Cycles 7 and 6 include the rising tide of populism in the West as well as in many middle-income countries, the increasingly intensified process in the UK towards Brexit and the growing economic imbalance between particularly Germany as opposed to most EU countries in particularly southern Europe within the Euro zone and the European Monetary Union. Cycle 5 includes some cases before the financial crisis in 2008–2009. Studies based on the British Household Panel Survey (BHPS) have clearly suggested the impact of major events such as the London terror attacks in 2005 and the financial crisis of 2008 on generalized trust (social trust) in other people as well as other aspects of social capital. According to the BHPS data, the prevalence of generalized trust in other people in the UK dropped from 45.4% in 2003 to 36.8% just after the terror attacks in 2005, then recoiling to 41.3% in 2007 (Giordano and Lindström, 2016). Similarly, the prevalence of generalized trust in other people was reduced by eight per cent units from 2007 to 2008, just after the 2008 financial crisis (Lindström and Giordano, 2016). Furthermore, the apparently very different lengths of the time lags between the different WVS cycles and the COVID-19 mortality data should also be taken into consideration in their own right.

References

- Bengtsson, T., Lindström, M., 2000. Childhood misery and disease in later life: the effects on mortality in old age of hazards experienced in early life, southern Sweden. *Popul. Stud.* 54, 263–277.
- Bengtsson, T., Lindström, M., 2003. Airborne infectious diseases during infancy and mortality in later life in Sweden, 1760–1894. *Int. J. Epidemiol.* 32, 286–294.
- Diex-Roux, A.V., 1998. Brining context back into epidemiology: variables and fallacies in multilevel analysis. *Am. J. Publ. Health* 88, 216–222.
- Elgar, F., Stefaniak, A., Wohl, M.J.A., 2020. The trouble with trust: time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries. *Soc. Sci. Med.* (this issue).
- Giordano, G.N., Lindström, M., 2016. The 2005 London terror attacks: an investigation of changes in psychological well-being and social capital pre- and post-attacks (2003–07) – a UK panel study. *SSM Popul. Health* 2, 485–494.
- Lindström, M., 2020a. The COVID-19 pandemic and the Swedish strategy: epidemiology and postmodernism. *SSM Popul. Health* 11, 100643.
- Lindström, M., 2020b. Populism and health inequality in high-income countries. *SSM Popul. Health* 11, 100574.
- Lindström, M., Giordano, G.N., 2016. The 2008 financial crisis: changes in social capital and its association with psychological wellbeing in the United Kingdom – a panel study. *Soc. Sci. Med.* 153, 71–80.
- 2015 Marmot, M., 2016. *The Health Gap. Improving Health in an Unequal World.* Bloomsbury Publishing PLC, London.
- Martins, J.G., Neves de Paiva, H., Paiva, P.C.P., Ferreira, R.C., Pordeus, I.A., Zarzar, P.M., Kawachi, I., 2017. New evidence about the “dark side” of social capital in promoting binge drinking among adolescents. *PLoS One* 12 (6), e0178652.
- McKeown, T., 1979. *The Role of Medicine.* Basil Blackwell, Oxford.
- OECD, 2019. *Under Pressure: the Squeezed Middle Class.* OECD Publishing, Paris.
- Schwartz, S., 1994. The fallacy of the ecological fallacy: the potential misuse of a concept and the consequences. *Am. J. Publ. Health* 84 (5), 819–824.

Sierminska, E., Brandolini, A., Smeeding, T., 2006. The Luxembourg Wealth Study. A cross-country comparable database for household wealth research. *J. Econ. Inequal.* 4, 375–383.

Wilkinson, Richard G., 1996. *Unhealthy Societies (1996). The Afflictions of Inequality.* Routledge, London and New York.
Wilkinson, R.G., Pickett, K., 2009. *The Spirit Level: Why More Equal Societies Almost Always Do Better.* Allen Lane, London.