

What ever happened to social capital in the internet era?



You are finally at home after a busy day at work. An invitation to join friends watching the latest episode of the Avengers saga at the cinema pops up on your smartphone. You are tired, and you already planned to spend a relaxing night at home, ordering pizza through Deliveroo, listening to your favourite music with Spotify and watching that addictive tv series on Netflix. Why ruin such a wonderful plan by going out with friends? Now, imagine you just moved to a new apartment and did not have the time to install a broadband connection at home. Your friends' invitation suddenly becomes more attractive.

Does the time we spend online displace our offline relationships? Does this possible displacement effect extend to civic engagement and political participation? Is the Internet weakening our social ties making us less connected than before?

[Our new paper](#) answers these questions using new evidence from the UK. We study how the introduction of high-speed Internet affected the social capital of the Britons. This is a tricky issue to deal with because endogenous sample selection and treatment assignment make it difficult to establish whether broadband penetration and social capital are connected by a causal relationship or just spuriously correlated. For example, the purchase of a fast Internet connection and aspects of social capital such as civic engagement may be co-determined by unobservable personality traits. Reverse causality is also at stake, as more socially active individuals may have a stronger propensity for using the Internet as a tool to preserve and extend their offline relationships.

The broadband infrastructure

To overcome these problems, the authors match information about the topology of the UK telephone network – including the geolocation of its nodes and of the blocks served by each of them – with geocoded longitudinal data taken from the British Household Panel Survey (BHPS). The resulting data set allows calculating the distance of the individual telephone line possessed by each BHPS respondent from the respective node of the voice network. Such a distance was a key factor of the access to fast Internet in the early years of broadband penetration.

Until the second half of the 2000s, in fact, broadband Internet was mostly based on the digital subscriber line (DSL) infrastructure, which allows for the transmission of data over the old telephone wires made of copper. However, the speed of a connection rapidly decays with the distance of a final user's telephone line from the node of the network serving the area, also called "local exchange" (LE). While at the time the network was designed in the 1930s the length of the copper wire connecting houses to the LE (also called *local loop*) did not affect the quality of voice communications, the introduction of DSL technology in the 1990s unpredictably turned distance from the LE into a key determinant of the availability of fast Internet, thereby creating exogenous discontinuities in broadband penetration. Proximity to the respective node of the network thus resulted in access to fast Internet, while more distant dwellings were *de facto* excluded from accessing the broadband.

Broadband Internet and social capital

The authors' results paint a complex picture. They find that, after the advent of broadband in the area, several indicators of social capital started to decrease with proximity to the node of the network, suggesting that the exposure to fast Internet displaced some dimensions of social capital, but not all of them. There is no evidence that broadband access displaced routine interactions such as meetings with friends. However, fast Internet crowded out forms of cultural consumption that are usually enjoyed in company such as watching movies at the cinema and attending concerts and theatre shows. In addition, broadband penetration significantly displaced civic engagement and political participation, i.e. time consuming activities that usually take place during leisure time, are not pursued in order to reach particularistic goals, and generally relate to a non self-interested involvement in public affairs.

Associational activities have been often mentioned as a form of *bridging social capital* creating positive societal and economic externalities, and the finding in this paper suggests an explanation for their reportedly declining trend.

For example, a 2 km reduction in the distance from the node, resulting in faster Internet, caused a 4.95 per cent decline in the probability of watching movies at the cinema, a 12.7 per cent decline in the probability of participating in the activities of political parties, a 4.8 per cent decline in the probability of participating in the activities of trade unions, a 6 per cent decline in the probability of participating in the activities of voluntary service organisations, and a 13 per cent decline in the probability of participating in the activities of scout organisations.

The developing role of fast Internet use, however, certainly calls for further investigation, as social media dramatically changed the role of Internet use. A more recent wave of internet studies suggests that social media may also support collective action and political mobilisation, especially in young democracies and authoritarian regimes, thereby providing a potentially positive contribution to the strengthening of political participation. Other studies, on the other hand, highlight how the increasing importance of social media in the public discourse entails new systemic risks, connected to the propagation of misinformation, the extreme polarisation of the political debate and [the spreading of online incivility](#). Future research should deal with these conflicting effects, also in light of the prominent role that a limited number of platforms, such as Facebook and Twitter, assumed in biasing results of the 2016 US presidential election and of the Brexit referendum.



Notes:

- This blog post is based on the authors' paper [Broadband Internet and Social Capital](#), IZA DP No. 11855, IZA-Institute for the Study of Labor, Bonn, 2018.
- The post gives the views of its author(s), not the position of the institutions they represent, the LSE Business Review or the London School of Economics.
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