



Approaching socio-digital inequalities from a global perspective: Challenges, possibilities and (in)compatibilities of a cross-country research project

What are the main challenges of doing comparative research? How can digital inequalities be examined across different countries, with their own socio-demographic, political, and technological specificities, at varying developmental stages? Is it possible to expect compatibility and comparability when it comes to diverse contexts?

It was in order to address these fundamental questions that international partners of the [*From digital skills to tangible outcomes \(DiSTO\)*](#) project reunited in London to exchange theoretical and empirical insights on the possibilities and (in)compatibilities of conducting comparative social research on digital inequalities.



Professor Alexander van Deursen, Dr Stefano De Marco, Professor Ellen Helsper, Dr Hernan Galperin, and Dr Moritz Büchi

Developing cross-nationally comparable measures

Dr Büchi says that one the main challenges of doing comparative research is the potential implication of applying standardised survey tools and questionnaires to different contexts. Especially in the case of quantitative, comparative projects, this means making the a-priori assumption that there is a relative equivalence of concepts, terms, and measures across contexts and/or countries. There is possibility

of error creeping into the results if these assumptions are violated. Dr Büchi argued that necessary but not sufficient steps to avoid these methodological biases include high-quality translation (in case of a comparison between countries with different languages) and consistent survey administration across different contexts. This serves to minimise variation in the data collection process and makes it more likely that ex post, statistical invariance testing supports equivalence. Relative flexibility in the wording of the questions means that the research teams balance abstraction and specificity so that comparisons can be made based on key mechanisms that capture the desired level of tangibility, rather than generalised, universal measures. That is, instead of literal translation, contextual translation that conveys the same meaning in different contexts is given priority in the DiSTO projects.

Developing cross-population comparable research

One of the core interests of the DiSTO project more broadly, is to investigate what the implications are of digital skills, access, and use, for the improvement of people's professional lives. The DiSTO Spain project led by Dr De Marco is called 'Digital inequality and job opportunities' It aims to understand the impact of digital resources, such as technical and communicative, creative digital skills and online network and reputation management, on using digital platforms for job-hunting. He points out that paying attention to potential methodological biases is necessary even in intra-country research. Spain, where Dr De Marco is conducting his research, has very high unemployment rates and the unemployed population in Spain has a high proportion of people over 50, which means it is more diverse and older than in many other countries. The challenge is to determine whether the large representation of the older age group is associated with a different distribution of skills and uses of online job searching platforms, and the potential impact of this on the transferability of conclusions drawn to other populations.

Developing more granular research

In addition to developing and adjusting measures, the DiSTO project is concerned with developing appropriate models and ways to study the relationships between the uses of digital technologies and real-world outcomes for the lives. Dr Galperin focused on potential alternatives to standardised surveys to address the challenges in conducting cross-national research on digital inequalities. Representative surveys which include large enough numbers of disadvantaged populations produce good results but are also very expensive. In cases where data on broadband availability and adoption is publicly available, he says, it is possible to produce fruitful insights from detailed maps of intra-city inequalities, which allow for the application of theoretical digital inequalities frameworks to a micro or local level. Currently in most cities, the analysis of available data allows for the understanding of the relationship between digital inequalities and the lack of investment in public goods in low-income minority areas, but it does not capture more granular data on digital skills. To really understand how digital inequalities are related to tangible outcomes and the alleviation or worsening of traditional inequalities this is a fundamental piece of the puzzle that is missing. A fundamental challenge is, therefore, to capture the granular, meaningful aspects of

the historical and institutional contexts in which marginalized populations appropriate new technologies in their everyday lives.

Developing research that is future proof

While some of the challenges raised are common to the comparative study of socio-digital inequalities more broadly, there are also problems that are particular to certain technologies and not others. Bearing this in mind, Professor van Deursen discusses the issues he encountered when conducting research on the Internet of Things (IoT) in the Dutch context. These issues made them question the correspondence between the (techno-utopian) expectations around IoT and the actual adoption of these artefacts in the context of everyday life. The use of IoT systems, according to him, raises a range of critical questions to research on digital inequalities: *What types of skills do these devices require? Are these skills similar when it comes to different types of technologies, such wearables and home appliances (energy meters, for instance)? If they are fundamentally different things, should we stick to comparing the number and type of devices people use? What will this tell us? In terms of digital inequality, what should we account for when comparing a technology that is in very different stages of availability and sophistication across countries?* The focus on access and connection rates was central to Internet inequalities' research for this field's first decade and this led to an overly optimistic picture of what technologies can do to alleviate inequalities. This turned out to be a mistake since widespread access to ICTs did not lead to equal opportunities to achieve outcomes from their use because of inequalities in skills, knowledge and available content and services. Professor van Deursen suggests that we should not wait to consider other factors and aspects of inequalities when it comes to emerging technologies even if we are not completely sure yet which skills, types of engagement and outcomes these technologies will require and facilitate.

In summary

The topics raised and the cases discussed vary significantly in terms of content but all problematize simplistic approaches to comparative global research on digital inequalities. What makes this research possible is the understanding that systematic inequalities in the abilities to access and use digital technologies and to, therefore, obtain positive outcomes and avoid negative ones, is central to current debates on inequality, development, capacity building and well-being. Advocating for better targeted and contextualised ICT access, skills training, and diverse content as an effective solution to social injustice is needed but requires careful consideration so as to not unthinkingly transplant models and measures developed in particular contexts into different contexts.

If you wish to continue the dialogue, engage with the DiSTO project on [Twitter](#), write us an [email](#) and keep an eye out for updates on our [website](#).

Background Information DiSTO

The DiSTO project does research into people's access, skills and uses of Information and Communication Technologies (ICTs) and the tangible outcomes of the adoption of these in people's everyday lives. This work feeds into the development, implementation and improvement of theoretical frameworks, evaluation and measurement tools, and policymaking and interventions. The DiSTO project currently has active partners in Brazil, Chile, Kuwait, Netherlands, Spain, United Kingdom, Uruguay, and the United States of America and is associated with partner projects such as the [YSkills](#), [Global Kids Online](#) and [World Internet](#) projects. As part of these efforts, researchers from partner institutions across the world have been trying to adapt to diverse settings and incorporate theoretical, conceptual, and methodological nuances particular to each empirical site.

Note: This report summarises the main insights and questions discussed on 6 February 2020 as part of the Research Dialogues at the Media and Communications Department at LSE. The research dialogues is a series of panels comprised of short presentations and debates, hosted fortnightly by the Department of Media and Communications. This report synthesises the main arguments and ideas discussed by four partners – [Professor Alexander van Deursen](#) (University of Twente, the Netherlands), [Dr Hernan Galperin](#) (University of Southern California, USA), [Dr Stefano De Marco](#) (University of Salamanca, Spain), and [Dr Moritz Büchi](#) (University of Zurich, Switzerland).

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