Personal Reflections on Our Context and Cognitive Digital Skills

TERESA CORREA[1]
Universidad Diego Portales, Chile

Connected in Isolation (Hargittai, 2022) will likely be one of the most comprehensive written records that testify to our digital, media, and information practices during one of the most unsettling times in our lives. At the onset of a global crisis, Eszter Hargittai assembled a research team and gathered comparative survey data from the United States, Switzerland, and Italy. Out of this exceptional effort, I would like to highlight two distinct ideas sparked by this book: transparency regarding our context as researchers and the importance of emphasizing the cognitive dimension of digital skills.

Social science research is highly contextual. But this book shows that we can be transparent not only about the context and culture of the phenomenon under study but also about our context as researchers. When Hargittai wrote *Connected in Isolation*, she started by reflecting on her and her team's own isolation, struggles, thoughts, and position at the time of the design and data collection. This is common in qualitative work but highly uncommon in a quantitative study like this one. Following the prescriptions of a quantitative epistemology, which argues for neutrality and controlled research environments (Babbie & Edgerton, 2023), we are often used to "sanitized," "uncontextualized" research that relies on quantitative data as if trying to demonstrate that distance from the object of study is a symbol of objectivity and scientific rigor. I often fall into the same trap when writing my own quantitative research. However, many times that distance is a pretense, and we ought to be transparent about it. This is what the scientific method is really about: to be transparent and publish all the methodological details and decisions if we want to produce rigorous research.

Perhaps one could argue that a crisis of the magnitude of COVID-19 warrants researchers sharing their own context and experiences. However, what should be the boundaries for researchers to be transparent about their own process? Some literature is increasingly examining how reflexivity benefits quantitative research (Jamieson, Govaart, & Pownall, 2023; Ryan & Golden, 2006). Reflexivity entails sincerity and openness regarding data collection, including details of how, where, and by whom the data were collected, and it reveals the researcher's positionality (Dutta & De Souza, 2008; Ryan & Golden, 2006). For instance, in many cases, quantitative social science explores topics and research questions that are not entirely "objective" but rather influenced by the researchers' own experiences and agendas. Incorporating this aspect into the reflexivity process does not undermine the rigor and replicability of the research; instead, it adds additional layers of analysis and interpretation.

In fact, Hargittai has promoted this reflexivity effort in the past. Three of her previous edited books published, *Research Confidential: Solutions to Problems Most Social Scientists Pretend They Never Have*

(Hargittai, 2010), *Digital Research Confidential: The Secrets of Studying Behavior Online* (Hargittai & Sandvig, 2015), and *Research Exposed: How Empirical Social Science Gets Done in the Digital Age* (Hargittai, 2021), seek to unveil the questions, processes, and hurdles that often remain hidden behind the curtains in quantitative (and qualitative) research. Writing a chapter in her last book about my own experience doing research on digital connectivity in rural communities in Chile made me think about the importance of reflecting and making transparent my own position and struggles in the research process. For example, I grew up in a rural community—perhaps that is the reason why I care about them—and in the middle of face-to-face survey fieldwork, we experienced unexpected rains and floodings in desertic towns, which forced changes in the original research design and helped explain why some communities have 10 respondents and others 60 (Correa & Pavez, 2021). Making the context and process transparent only adds to the scientific rigor and provides more elements for readers and academic peers to evaluate and interpret the results, as this book clearly demonstrates.

In addition, Hargittai led this project in a context of pandemic lockdowns but argues that these processes and results could be applied to other contexts beyond COVID, such as regional crises or disasters. I agree. However, we will rarely have another opportunity to collect comparative data and understand how people from different geocultural backgrounds respond to a global crisis. This was an unparalleled opportunity to design a comparative research study. The common patterns and different results in many dimensions suggest how important it is to take into account the context where the research is being conducted, even in "well-known" cultures such as the United States. Many research studies conducted in Western Europe or North America seem to be conducted, as Pablo Boczkowski (2021) calls it, in the "nowhere." They do not describe the context and seem to appear as the norm, when we know that, many times, they are far from being the "norm." Many results of this research suggest that the United States was far from the being the "norm." Therefore, as other scholars have argued (Boczkowski, 2021; Rojas & Valenzuela, 2019), all social science research is context dependent, and we should encourage all research, not only investigations conducted outside the so-called Global North, to reflect on and describe how the context and time period shape the phenomena and relationships under study. In this book, for example, the context of the three countries enlightened the results. When contexts are well described and observations do not happen in a vacuum, readers can grasp which elements are applicable to our own contexts, which are not, and why.

Regarding the second point, I argue for the need to emphasize the cognitive dimension of digital skills. Hargittai (2022) argues that digital skills have different dimensions. She says:

> Digital skills encompass knowing what is possible through digital technologies and the ability to engage with those possibilities effectively and efficiently. Such skills have multiple dimensions, from awareness of what can be done online to how to engage on various platforms in ways that benefit the user and that help avoid negative outcomes such as scams. (p. 5)

According to this framework, awareness and knowledge (the cognitive dimension) are related to behaviors such as performing certain actions. In fact, when measuring digital skills in surveys, Hargittai adopts a cognitive approach. She has developed a proxy measure that assesses people's knowledge or level

of understanding of various Internet and social media-related terms on a five-point scale. For instance, the terms include *advanced search, PDF, spyware, wiki, cache,* and *phishing*. Regarding social media, the items encompass *privacy settings, meme, tagging, followers, viral,* and *hashtag*.

Much of the focus of digital skills interventions has been on teaching technical and operational abilities. However, simply using technology more extensively or possessing greater technical skills does not necessarily lead to increased opportunities and avoidance of risk for individuals who are already connected. Hargittai's research revealed that those who relied on social media for COVID-19 information had less knowledge about the virus and were more likely to believe misinformation. Therefore, in the current rapidly evolving digital landscape, flooded with new applications and platforms, information and misinformation overload, algorithm-mediated social media, and platforms powered by artificial intelligence (AI), I do think that we need to place stronger emphasis on the cognitive dimension of skills or literacy.

The cognitive dimension involves awareness, knowledge, and understanding of how digital technologies work, while the behavioral dimension has to do with what people do with technologies, how they use them based on their knowledge and attitudes. "Awareness of what is possible is a prerequisite for many online actions," said Hargittai (2022, p. 6). In a postpandemic context, many governments increased their levels of digitalization and most of the procedures with the state went online, potentially increasing inequalities in access to information and opportunities delivered by local or national governments. Therefore, if people know what they can or should do, even if they do not know technically how to do it, they can create strategies to obtain it through digital intermediaries or their own learning (Pavez, Correa, & Farías, 2023).

The cognitive dimension also involves critical and evaluative skills to be able to evaluate the information and sources people interact with in digital environments and their social implications. For example, in the case of technologies mediated by AI-based algorithms, it implies an understanding of the principles and methods that explain the functioning of these types of technologies and their social and political implications (Cotter & Reisdorf, 2020). Based on this knowledge, they might execute certain actions (e.g., accepting or not accepting a cookie in a certain context, applying privacy filters, deactivating or activating GPS according to context and needs).

In the same line, Hargittai (2022) asserts: "understanding digital media better may help people identify credible sources and sidestep questionable ones. It can also help them home in on desired and applicable content through more refined searches" (p. 100). This ability would help identifying scams and unverified information. The results of this project suggest that in the case of misinformation beliefs, there might be other reasons, beyond skills, such as attitude extremity or strengthening communities' identities, that explain the spread of misinformation. True. However, if awareness, knowledge, and evaluative cognitive skills are not present, it is difficult to navigate the challenges we face in our (digital) lives.

In summary, *Connected in Isolation* (Hargittai, 2022) provides us with an exceptional opportunity to reflect upon a period that marked a significant turning point in our field and lives. Drawing on my experience as a scholar studying digital inequality, conducting most of my research from Chile but engaging with global audiences through English-speaking publications, in this short essay I have chosen to focus on two distinct aspects that I believe push the boundaries forward: the importance of transparency regarding

the research and the researcher's contexts, and the necessity to further explore and develop the cognitive dimension of digital literacy. This book sets an example that other research could follow.

References

Babbie, E., & Edgerton, J. D. (2023). *Fundamentals of social research*. Toronto, Canada: Cengage Canada.

Boczkowski, P. J. (2021). *Abundance: On the experience of living in a world of information plenty*. Oxford, UK: Oxford University Press.

Correa, T., & Pavez, I. (2021). Going rural: Personal notes from a mixed-methods project on digital media in remote communities. In E. Hargittai (Ed.), *Research exposed: How empirical social science gets done in the digital age* (pp. 184–204). New York, NY: Columbia University Press.

Cotter, K., & Reisdorf, B. C. (2020). Algorithmic knowledge gaps: A new horizon of (digital) inequality. *International Journal of Communication*, *14*, 745–765.

Dutta, M. J., & De Souza, R. (2008). The past, present, and future of health development campaigns: Reflexivity and the critical-cultural approach. *Health Communication*, *23*(4), 326–339. doi:10.1080/10410230802229704

Hargittai, E. (Ed.). (2010). *Research confidential: Solutions to problems most social scientists pretend they never have*. Ann Arbor: University of Michigan Press.

Hargittai, E. (2021). *Research exposed: How empirical social science gets done in the digital age*. New York, NY: Columbia University Press.

Hargittai, E., & Sandvig, C. (Eds.). (2015). *Digital research confidential: The secrets of studying behavior online*. Cambridge, MA: MIT Press.

Hargittai, E. (2022). *Connected in isolation: Digital privilege in unsettled times*. Cambridge, MA: MIT Press.

Jamieson, M. K., Govaart, G. H., & Pownall, M. (2023). Reflexivity in quantitative research: A rationale and beginner's guide. *Social and Personality Psychology Compass, 17*(3), e12735. doi:10.1111/spc3.12735

Pavez, I., Correa, T., & Farías, C. (2023). The power of emotions: The ethics of care in the digital inclusion processes of marginalized communities. *Social Inclusion, 11*(3). doi:10.17645/si.v11i3.6623

Ryan, L., & Golden, A. (2006). "Tick the box please": A reflexive approach to doing quantitative social research. *Sociology*, *40*(6), 1191–1200. doi:10.1177/0038038506072287

Rojas, H., & Valenzuela, S. (2019). A call to contextualize public opinion-based research in political communication. *Political Communication*, *36*(4), 652–659. doi:10.1080/10584609.2019.1670897