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"I Don't Use the Internet": Exploring Perceptions and Practices Among Mobile-Only and Hybrid Internet Users

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Mobile-only use in developing countries is increasing as public policies pursue universal Internet access through mobile connections and smartphones to tackle digital inequality. Therefore, it is relevant to understand what mobile phones mean for people, how they engage with them, and new forms of digital inequality that may emerge. Thus, from a digital inclusion and technology affordances perspective, this article reflects on the perceptions and practices among mobile-only and hybrid users (mobile and PC). The study, conducted in Chile, a country with high levels of mobile connectivity, relied on 30 in-depth interviews and digital tours, an ethnographic strategy to access participants' smartphone customization and usage. Findings indicate that mobile-only users perceived no differences from that of using computers, developed practices to circumvent their lack of skills, and perceived no need to include a more complex device, such as a computer. Hybrid users, on the other hand, evaluated their gateway access according to their goals and contexts and were more critical of being constantly online and of the role of the Internet in their everyday lives.

Keywords: Internet, digital inclusion, digital inequality, mobile phones, mobile-only users, Chile

In a quiet plaza of Los Andes, a small town in the lower lands of the Andes Mountains in the central region of Chile, Juan (55),[2] a baker, is sitting on a bench, on a sunny afternoon. He is juggling with his mobile phone, trying to find the number of his romantic date, who is late. He scrolls down a list of recent calls, all contacts with no names, just telephone numbers with spherical color icons next to each number. "I do not know

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how to register a phone," he explains; "however, I can recognize a number by the color next to it;, she is green." When we ask whether he uses the Internet, he says, "No, I don't use the Internet." However, he opens WhatsApp to message the woman he is waiting for. Juan, as do other participants in this project, believes that he is not an Internet user because he does not browse the Web, showing that he is not completely aware of the presence of the Internet on his phone.

This example also shows that mobile phones are currently an entrance to the digital world, particularly for people who have not had the opportunity to access it before (Ensley, 2005; Fong, 2009); however, they may not be aware of it. It also shows how the device or devices of Internet access shape people's digital experiences and are also a key topic when discussing digital opportunities (Ling & Horst, 2011; Reuver, Nikou, & Bouwman, 2016).

Because public policies around the world have been tackling Internet access inequality through the expansion of mobile connections, particularly in developing countries (Donner, 2015; Strover, 2014), it is relevant to thoroughly understand what mobile access means for people and how they engage with mobile technologies. Beyond the physical connection, there is also a need to address several issues related to digital inclusion, such as what people can do or need to do online, and how the portability and availability of devices present people with opportunities and challenges to achieve their needs and goals (Mascheroni & Ólafsson, 2013; Schrock, 2015).

As themes and findings emerge more clearly when they are compared (e.g., Dye, Schatz, Rosenberg, & Coleman, 2000), this study contrasts the perceptions and practices of mobile-only users (those who depend exclusively on mobile phones to go online) with hybrid users (those who go online from a more diverse set of platforms and devices).[3] Perceptions and practices are analyzed from a social constructivist point of view and under the concept of affordances. These are conceived as interactions with technologies that give form to routines, behaviors, and uses that are born in the context of people and are meaningful to them (i.e., Humphreys, Karnowski, & von Pape, 2018; Schrock, 2015; Treem & Leonardi, 2012). The data were collected through interviews and were complemented with "digital tours" (Bakardjieva, 2005), an ethnographic technique in which participants grant access to their smartphones and part of its content, while explaining their actions and organization of their digital artifacts. As a result, it is possible to complement people's discourses with their own descriptions of their practices and rationale behind the screen of their mobile phones.

The main findings indicate that perceptions and technological experiences are key to understanding how users make sense of mobile phones and computers, as well as to set expectations about what it means to be online. Mobile-only users perceived no differences between what could be achieved through mobile phones and computers and expressed no need to go online using a different device; therefore, they are less like to become hybrid users. Furthermore, they presented a moderate range of digital abilities when compared with laptop users. However, they develop their own strategies to circumvent their lack of skills, which increased their sense of agency. On the other hand, hybrid users were more critical of the pervasiveness of smartphones and

[3] For this study, we will consider hybrid users as those who access the Internet from smartphones and computers or laptops.

being constantly online, yet they had the opportunity to evaluate their gateway access according to their particular goals and contexts.

Developing Countries Going Mobile and the Case of Chile

In a context where 51.2% of the population worldwide is using the Internet (International Telecommunication Union, 2018), mobile broadband is expanding rapidly, particularly among developing countries (Napoli & Obar, 2014; Pew Research Center, 2016), as more than 70% of their population owns a mobile phone (International Telecommunication Union, 2018). From a public policy standpoint, this trend can be interpreted as a cost-effective opportunity to help disadvantaged populations go online (Donner, Gitau, & Marsden, 2011) and to reduce Internet access inequalities (Pearce & Rice, 2013; Stork, Calandro, & Gillwald, 2013). This is mainly because smartphones are more affordable and easy to use than computers are, and hence they could increase the number of Internet users and close the access to a device gap, particularly in the global south (Ling & Horst, 2011).

For instance, in South America, the Internet penetration rate has reached 71.8% (Internet World Stats, 2018) mainly because of public agendas that have pursued access infrastructure (Rojas & Poveda, 2018). Furthermore, mobile connections have advanced more in South America than in other regions of the world (International Telecommunication Union, 2018). In this region, Chile stands out because of the growing pervasiveness of smartphones used to connect to the Internet. This country of 17 million people has 13 million mobile connections, and 93.1% of such access is linked to a smartphone (Subtel, 2017). Furthermore, it has one of the most ambitious digital agenda in Latin America, with more than 64 digital policies in areas such as education, economic development, and e-government (Digital Agenda 2020, n.d.; Rojas & Poveda, 2018), including the Telecommunication Development Fund, to provide mobile connection in remotes areas (Correa & Pavez, 2016). These long-standing initiatives have positioned the country as one of the leaders in Internet access and usage in the region (Rojas & Poveda, 2018). Therefore, Chile represents an interesting case for studying how public policies pursuing universal access from mobile connections and smartphones play a role in the digital inequality arena and comparing the implications of mobile-only users with people who rely on various devices.

Affordances, Mobility, and Digital Inclusion: A Theoretical Approach

Affordances and the Making Sense of Technologies

Devices are the material from which it is possible to make sense of the Internet, to interpret it, and to adopt it. Users can shape it according to their needs, interests, and abilities (Bailey, 2012). This process is related to users' social, cultural, and technical contexts as well as to their beliefs, experiences, and networks (Humphreys et al., 2018). Furthermore, the premise of access as the only venue to be digitally included assumes that users are equal in their circumstances and therefore value (and use) equally what devices may offer them (Hutchby, 2001). However, objects may be valued differently in various situations and life circumstances, which helps us to understand how particular populations adopt specific technologies (Haddon, 2004). For instance, parents in rural isolated villages sometimes viewed online video games as a source of danger for their kids, whereas parents who live in low-income urban areas see these games as a

safe place that kept kids off the streets (see Pavez, Correa, & Contreras, 2017). Although producers determine and envision how an object should play a role, consumers reappropiate it according to their practices in the context of their everyday life (de Certau, 1984). These nuances are an invitation to look at users' social and technological contexts to unfold their appropriation processes (Bakardjieva, 2005; Berker, Hartmann, Punie, & Ward, 2005) to consider how devices' features play out according to what people may perceive to be meaningful or useful (Sørensen, 1994).

One theoretical way to approach this exchange between agency and devices is the concept of affordances. Following a social constructivist point of view (Bijker, 2001), affordances involve the interaction between the technology and the users' social construction of it, from which the properties of a device emerge (Treem & Leonardi, 2012). Schrock (2015) also argues that affordances touch upon users' perceptions, the properties of the device, and how it is used, giving rise to patterns of behavior in relation to certain devices and cultures. For example, looking particularly at mobile media, among other affordances, the author discusses portability and availability arguing that these are key to understand how smartphones are integrated into social contexts, enabling a constant contact but also negotiation about using the devices accordingly (Schrock, 2015).

Yet, as Humphreys and colleagues (2018) argue, smartphones are a compound of media (e.g., camera, phone, multimedia player), as they offer a set of affordances that are a result of the interaction among the multiple media housed in the device, the gratifications that these media report to users, and the contexts of use. This triad reinforces the argument that it is people's sense making that should prevail, valuing local practices and subjectivity in everyday life (Boczkowski & Lievrouw, 2008). Furthermore, it helps to analyze the affordances perceived among profiles of users because their technological contexts and gratifications may vary when opportunity to interact with the Internet is limited to one device (i.e. mobile-only users) compared with more devices (i.e. hybrid users). Therefore, how users perceive different affordances by these devices and comparing them helps in unfolding their digital inclusion process.

Mobile Phones and Connection on the Go

Scholars have agreed on the cultural changes, social consequences, and effects of mobile phones on different spheres of life (Campbell, 2013; Donner 2015), particularly their influence on social networks, jobs, and overall social inequalities (Green & Haddon, 2009). The development of technologies has linked smartphones to a metamedium rather than to an actual phone, and because of the various media that can be used, they have been defined as "a structure into which constituent media are nested" (Humphreys et al., 2018, p. 2795). Although this is similar to other devices, such as computers, it has also been claimed that the mobility and portability of smartphones have made a difference (Humphreys et al., 2018). For instance, they allow connection and interactions on the go, either with others and with spheres of information and leisure, filling spaces of idleness in ways that users sometimes are not even able to recognize. This constant "social connectivity" (Campbell, 2013) of being online while in physical motion changes how users deal with this material object according to different places and situations.

Furthermore, using and interacting with the Internet at hand in social situations has gained more acceptance. The place that mobile phones have gained in everyday life is, in part, due to their materiality,

and this also depends on particular cultures and social relationships (de Souza e Silva, Sutko, Salis, & de Souza e Silva, 2011; Ito, Okabe, & Matsuda, 2005; Martínez, Agra & González, 2015). For instance, some authors have reflected on how physical aspects of devices unwrap in social contexts by comparing mobile phones to laptops and other wearable technologies, which play a part in how these are appropriated in different contextual situations (Humphreys et al., 2018; Schrock, 2015).

Mobile Phones From a Digital Inclusion Perspective

It has been argued that, from a digital inequality point of view, focusing exclusively on smartphones as a port of Internet access is problematic because digital inclusion is a process that does not end when connection is achieved (e.g., Correa, Pavez, & Contreras, 2017). On the other hand, it is a complex path that includes online as well as off-line elements and the development of digital practices that enable users to get the most out of the network according to their circumstances and needs (Helsper & Reisdorf, 2016).This is why, when discussing digital inclusion, it is relevant to combine technical aspects (such as access, device, and signal quality), digital skills, and types of use, which are interspersed with social and cultural contexts that shape the experience (Hargittai & Hinnant, 2008). This allows us to reflect on the role of technology in daily life and how it is limited or strengthened in a given environment. Furthermore, accessing the Internet exclusively from mobile phones presents a series of challenges. In fact, it has been noted that "it can reinforce, and even exacerbate, inequalities in skill sets, digital, online participation and content creation. As a result, Internet users only for mobile devices become, in many ways, second-class online citizens" (Napoli & Obar, 2014, p. 330). For instance, it facilitates activities mainly focused on fostering communication and recreation (Pew Research Center, 2016) rather than others that required more organization, reflection, or complex tools (see Humphreys, Von Pape, & Karnowski, 2013).

Researchers also suggest that relying on strategies that present fewer entry barriers—such as mobile connections—is giving way to new forms of "under connection" (Katz, 2017) and even "second class" Internet users (Napoli & Obar, 2014). Therefore, although the use of smartphones represents a quick and economic opportunity to reduce access gaps (Donner, 2015; Fong, 2009), it is not entirely clear how vulnerable populations or groups with limited or no previous experience with the network are engaging with this type of access. Moreover, it is unclear how mobile devices allow the development of motivations and digital skills that go beyond communication and entertainment, giving way to more diverse types of uses related to educational, economic, or professional opportunities. These kinds of enquiries, in addition to the evidence of mobile phones as being a first step to becoming digitally included, guide the following research questions:

RQ1: How do mobile-only and hybrid users perceive the value of mobile Internet connection?

RQ2: How do type of access (i.e., mobile-only and hybrid users) lead to practices and ways to handle the devices that are born in users' experiences and own sense of expertise?

RQ3: How do perceived affordances influence people's approach and evaluation of devices that lead to their digital inclusion?

Method

This study employs a qualitative approach with ethnographic elements because the objective is to capture perceptions and practices contextualized by users. Following the strategies proposed by Bakardjieva (2005; Bakardjieva & Smith, 2001), which allow capturing from both sides of the screen people's speeches, perceptions, practices, and digital actions, we have used two techniques to collect the data: semistructured interviews and "digital tours" (Bakardjieva, 2005). Specifically, we conducted 30 semistructured in-depth interviews that provided evidence of both the immediate environment of the users, as well as their attitudes and discourses (Esterberg, 2002). The interviews were complemented by a digital tour (Bakardjieva, 2005; Bakardjieva & Smith, 2001), an ethnographic technique where the interviewees give the researcher access to the device—in this case, their smartphones—and part of its content, while narrating the how and why of their actions, in addition to the importance and organization of their digital artifacts. This process is recorded in the form of notes and voice files to avoid interruptions in their natural way of relating to technology. These ethnographic elements also provide flexibility in data collection because they are specific to the environment and give a higher degree of observation and inferences (Geertz, 1973) about the uses and benefits in the words of the interviewees. The main advantage of this methodological approach, which complements interviews and the digital tour, is that it allows enriching the information reported by the participants (Bryman, 2012) by exploring their rationale and motivations when appropriating technologies in response to their contexts. In addition, the digital tour is used to contrast opinions, perceptions, and statements with actions.

The 30 participants were adult (18 years old and older) Internet users, stratified according to three criteria: access device (mobile-only and hybrid users); geography (urban and rural); and gender (seven women who were mobile-only users and eight women who were hybrid users; six men who were mobile-only users and nine men who were hybrid users). Their ages ranged from 19 to 64 years (see Table 1). The interviews took place in the three most populated regions of Chile (Valparaíso, Concepción, and the Metropolitan Region). Ten of 16 hybrid users accessed the Internet from a computer (laptop or desktop) at their place of work. Among the remaining six, one used a computer at home because of her education obligations, another to run her venture, and four for leisure and communication. Mobile-only users exclusively accessed the Internet through their smartphones in the past year. Among the 13 interviewees, 12 had manual jobs (e.g., cleaner, baker, homemaker, concierge). Only one mobile-only user had a job as a freelance social media manager. Because of low penetration of tablets in the country, we did interview tablet users (Subtel, 2017). After answering a screening questionnaire to determine whether they were Internet users as well as mobile-only or hybrid users, participants were invited to participate in the project and read the informed consent. The interviews took place between January and April 2018 in the houses and workplaces of the participants as well as a few public places such as coffee shops or plazas. The interviews and the digital tours' notes and voice files were transcribed. We then conducted a thematic coding analysis (Boyatzis, 1998). This technique allowed the organization of segments by themes throughout the interviews and digital tours' notes, which were labeled by the creation of codes (Fielding & Thomas, 2008). We could then capture and compare data within topics, map descriptive findings, and highlight emerging issues (Flick, 2002). Therefore, the main topics were previously determined by the literature and were linked to aspects related to access devices, types and context of use, efficacy, and outcomes of Internet use. The interviews were conducted in Spanish by Spanish-speaking researchers. The excerpts were translated into English and back-translated to ensure accuracy.

Table 1. Details of Participants.

	Name	Gender	Age	Activity	Zone
Mobile-only users					
1	Marisela	Woman	42	Homemaker	Rural
2	Jorge	Man	64	Unemployed	Rural
3	María	Woman	44	Housekeeper	Urban
4	Andrea	Woman	39	Housekeeper	Rural
5	Andy	Man	24	Cleaner	Urban
6	Daniel	Man	34	Street salesperson	Rural
7	Juan	Man	55	Baker	Rural
8	Nelly	Woman	33	Street merchant	Urban
9	Gerardo	Man	32	Tattoo artist	Urban
10	Teresa	Woman	28	Kitchen assistant	Urban
11	Marta	Woman	72	Homemaker	Rural
12	Pia	Woman	26	Journalist	Urban
13	José	Man	56	Concierge	Urban
Hybrid users					
14	Mauricio	Man	47	Manager	Urban
15	Ignacio	Man	19	Baker	Urban
16	Gabriela	Woman	34	Homemaker/student	Urban
17	Jorge	Man	22	Security guard	Urban
18	Karine	Woman	23	Nursing student	Rural
19	Víctor	Man	22	Packager	Rural
20	Cecilia	Woman	51	Programmer	Rural
21	Patricio	Man	38	Civil constructor	Urban
22	Maria Paz	Woman	29	Accounting assistant	Rural
23	Elizabeth	Woman	33	Parking assistant	Urban
24	Amada	Woman	62	Nurse assistant	Rural
25	Catalina	Woman	25	Teacher	Rural
26	Kevin	Man	22	Constructor	Urban
27	Gonzalo	Man	26	Accounting assistant	Urban
28	Diego	Man	32	Engineer	Urban
29	Raquel	Woman	64	Retired	Rural
30	Alvaro	Man	23	Engineer assistant	Rural

Mobile-Only and Hybrid Users' Insights, Practices, and Perceived Affordances

Results were organized in three subsections according to the three research questions, as the findings show that perceptions and practices are closely intertwined. The perceptions shape people's actions, but their technological practices also set their expectations and the role that mobile and computers should have in their everyday lives. Therefore, we first looked at how mobile-only and hybrid users perceive the value of mobile Internet connection, and how their point of view is closely related to their own technological

and social contexts. Secondly, we analyzed how both types of users' profiles lead to practices and ways to handle the devices that are born in their digital experiences and own sense of expertise. Finally, we examined how their perceived affordances influenced their approach and evaluation of devices, providing a range of opportunities that are linked to their Internet gateway of access affecting their digital inclusion process.

Technological Perceptions: "I Am Where Everyone Else Is" Versus "Exhausting"

To address the first research question—how mobile-only and hybrid users perceive the value of mobile Internet connection—we first use the case of Marta (72). She lives in Coelemu, a rural town in the southern region, and started using a smartphone later in life, about five years ago. She now relies on WhatsApp, Facebook, and Instagram to communicate with others, and carries her cellphone wherever she goes (she says, "It's my friend, my mate"). She values this mobile Internet access because now she feels "where everyone else is." She also uses Google for seeking health information. She was diagnosed with cancer a couple of years ago and describes feeling comforted by searching online about health treatments, medicines, and doctors:

> [The mobile] is more information, more help, because before everyone said, "I do not know," "We don't know." Now you say: "Go online, in such part, such page" . . . it helps you a lot, have you noticed? For me, it's information, you can't use it in a silly way or waste your time on it. (Marta, 72, rural area, mobile-only user)

When she is prompted to think about computers, she says she is not interested because she is "used to the telephone . . . computers are too heavy [to carry]." She is also satisfied with the skills she has learned: "I'm ok, I don't need to learn anything else."

Like Marta, many mobile-only users tended to explain that their lack of access through a more complex device, such as a computer, is because it would make no difference in terms of content. As evidence from previous research has shown (Humphreys et al., 2018), she reflected on the importance of the portability of the device, stating that it was much more relevant for her. Therefore, when mobile-only users discussed access to the Web from a computer, the natural question for them was, why would it be necessary? For Marta, this is mainly based on the premise that "I would use [a PC] for the same." Another example of this is the case of Andy (24):

> To use a laptop is not something that keeps me awake at night. I don't think it would make any difference! Perhaps I would use it [a laptop] more at home, but I would use it as I do with my mobile, to watch videos, to see movies, to archive pictures. (Andy, 24, urban area, mobile-only user)

In this sense, if the content or processing capacity makes no difference or is considered irrelevant, people tend to evaluate the use of the Internet based on the device's advantages and disadvantages, and smartphones are generally more valued than computers for their portability and ease of use. This shows how mobile-only users—who tend to be newer users, with a lower SES—focus mainly on the materiality, particularly the mobility and portability to assess smartphones (Goggin, 2009; Humphreys et al., 2018),

and the possibility of social connectivity on the go (Campbell, 2013). In this sense, as de Souza e Silva and colleagues (2011) said, the place gained by mobile phones and the value of their materiality depends on particular social contexts. For instance, Jorge (64), a retiree from a southern rural area of the Metropolitan Region, used a public transportation metaphor to explain the relevance of mobile phones in his situation.

> [Being disconnected] is a disadvantage, because many times you need a service and you do not have a service. For example, transportation (in the town) is very bad too, so the only vehicle to connect is this [show his mobile], faster, and if it's failing . . . there's nothing left. (Jorge, 64, rural area, mobile-only user)

Mobile-only users in this research study expressed no major criticisms toward the pervasiveness of Internet access, because it was not an evocative theme for them (Hine, 2000). On the contrary, the social connectivity argued by Campbell (2013), of being constantly online and how users deal with this material object according to different places and situations, was much more pervasive among hybrid users. Although they valued the smartphones as an access device, also showed more criticism about its pervasiveness in everyday life, with expressions such as "The world's largest library in our pockets, but it is used in a very coarse manner," and using words like "noxious," "exhausting," "magnetism," and "anxiety":

> The information is exhausting—having information about so many things and not being able to discriminate, you exhaust everything, and you are out of focus. You have things to accomplish in your day, and you realize that you were 10 minutes on the phone watching things that were not useful . . . there one becomes aware of how the Internet is handled. (Diego, 32, engineer, Concepción, urban area, hybrid user)

The capacity to evaluate and critically reflect on the consequences of Internet use in social terms, such as the use of time and the need to have skills for discrimination of information, could be born in the structural differences among mobile-only and hybrid users, in terms of levels of education, activities performed, and also a more wide-ranging access and use of the Web from different devices. This is related to Schrock's (2015) argument because it touches on how devices need to be integrated into social contexts, enabling negotiation about using the devices accordingly, which is naturally prevalent in hybrid users rather than mobile-only users. Therefore, although both profiles of users face the "same" generic technology, the affordances perceived are different, as well as how they interact with the technology (Wessels, 2012). Participants from more vulnerable backgrounds showed no awareness of this kind, and when they were asked about disadvantages or challenges, their concerns were related to the use of the device in different social situations, which could be socially disruptive, and/or the importance to control or limit its access to minors.

These different perceptions allow one to reflect on the prevalence of digital inequality, which goes beyond access. Rather, it is related to the perceptions and opportunities that are associated and shaped by people's practices. Then, aspects linked to communication and information needs, for example, fulfill an important role, but they are valued differently as the process of digital inclusion progresses. Whereas mobile-only users appreciated the ubiquity and portability of communication and information-seeking opportunities, hybrid users tended to be more critical of the pervasiveness of communication and information overload.

Technological Practices: The Developing of Shortcuts and Compensating Strategies

The second research question asked about how type of access (i.e., mobile-only vs. hybrid users) lead to practices and ways to handle the devices based on users' experiences and their own sense of expertise. We found that many times mobile-only users developed practices to compensate for their lack of skills. For example, Andrea (39) is from the rural town of El Monte. She works as a housekeeper in Santiago, and every day she travels an hour and a half by bus. During her commuting, her mobile becomes a companion. She listens to music, shares messages, and watches series on Netflix. She also enjoys taking selfies and using these photos as her mobile's lock images, which she changes regularly. Her mobile has three screens full of applications. When talking about them, she assures that many were there before she got the phone, and she does not know what they are for:

> It came ready like this [the mobile]. I could rearrange it, but I don't know how to get rid of the other things I don't use. My favorites are music, the camera, the gallery [of photos], the Messenger, the WhatsApp, and the contacts, although I am unsure how to register these . . . . I always look for (the history of) calls, in call records. I have always the same people and that's how I find them faster. I do not know how to place them in a favorite, either; that's why I do not have them in contacts. (Andrea, 39, rural area, mobile-only user)

Similar to the cases of other mobile-only participants, Andrea's example shows that despite people's heavy use of their mobile phones, they are not using their full capacity. For instance, she does not know how to create a list for favorite numbers; however, she does not want to ask for help because she is confident that she has found a way to managed her phone effectively: "It is easier and with less fuss. I know that I have the call here and I dial it and it appears, but here in contacts, for example [showing on her mobile how to do it], I have to be searching, searching and searching; my way is better." This case shows how her possibilities of action are born out of regular contact with her phone, but also shaped by her context—yet she is adopting and managing the qualities of her mobile to the affordances perceived by her (Treem & Leonardi, 2012).

Elizabeth (33) works as a parking lot attendant in Los Andes and lives in the nearby community of Culiman, within a 15 minutes bus ride. She also has a small entrepreneurship assembling kitchen furniture. She has limited access to a computer in her household because her son got a laptop with one year of Internet through his school. She says she can do some basic thing on it, such as a searching on Google and looking for videos on YouTube. However, she needs help to use e-mail and therefore feels more comfortable using her mobile. While doing the digital tour with us, she shows that has she has three screens full of applications, but is only keen on two social networks—WhatsApp and Facebook—which are spread across the screens and are therefore not easily accessible. For WhatsApp, she expresses she would like to know how to mute her former high-school classmates, the only group she is in. She also contacts her clients for the kitchen furniture entrepreneurship through WhatsApp, on a one-on-one basis. She claims she uses the e-mail; however, the phone does not have an e-mail account. Moreover, this case shows that although she is mostly a mobile-only user, she has access to both the computer and mobile and runs a small entrepreneurship. However, her digital skills are limited in both devices. Thus, sometimes

the mere access to more devices does not necessarily imply more digital abilities. From a digital inclusion point of view, other elements from her context as well as structural factors that, in association with the device, help to explain her limited abilities. The prominent role she gives to her mobile rather than to the computer is also a response to the materiality of it, how it helps her to engage with social relationships, and the particularities of her vulnerable environment (de Souza e Silva et al., 2011), such as the lack of a support network that may provide guidance and the opportunity to explore freely both devices to gain more experience and expertise.

These two examples complement the case of Juan, mentioned at the beginning of the article. As affordances touch upon users' particular perceptions of the properties of the device (Schrock, 2015), he uses color icons and memorizes numbers to identify his phone contacts and is not aware that he uses the Internet because he does not access it through a Web browser. His own patterns of use, which is a reflection of his social, cultural, and technical experiences and networks (Humphreys et al., 2018). These cases show that participants, through hours of practice, develop strategies to approach the technology and sometimes circumvent or compensate their lack of skills. Eventually, they find a way that, according to their perception and possibilities of action, suits them better. These practices also shape people's perceptions about what is "Internet" and what it means to "be online." Thus, the perceived technology affordances and practices shape people's perceptions that are not easy to change, and the mobile gains a prominent role in the everyday life of users because of its mobility and ease-to-use apps. In other words, the practices set perceptions. So, unless a new need is born, it is unclear whether what is perceived as familiar and easy to do—as with mobile phones—will be changed by using a different or more complex device, such as a PC.

Perceived Affordances and the Road to Digital Inclusion

The third research question asked how perceived affordances influence people's approach and evaluation of devices and lead to their potential digital inclusion. We found that the switch from one device to another, and the possibility of comparing the advantages and disadvantages of usage according to the situation, did not apply to all participants. In the case of mobile-only users, the first barrier was having nothing to compare it to. Although they know about computers or at some point might have used one, they did not show interest or willingness to embrace them because they perceived that the mobile fulfilled their needs, which is in line with the argument of smartphones being a metamedium (Humphreys et al., 2018). It is also related to the tendency to use mobile phones for less complex activities, such as communication and entertainment (Napoli & Obar, 2014). In comparison, hybrid users who also had access to a laptop or desktop expressed a fuller range of opportunities that furthered their ability to evaluate them, as well as interpret them under a different light, which is similar to other evidence found by researchers of this topic (e.g., Humphreys et al., 2013; Klein & Kleinman, 2002). Patricio (38), for example, is a hybrid user. He feels he is "stuck" to his computer every day from Monday to Saturday in his shop. The computer is crucial for him, particularly because the shop does not have a good signal for his mobile, which looks new. "It's because it is on the shelf all day, and when I go out, it is in my pocket," he explains. On his computer, and because of his business, he needs to be in constant communication with suppliers and clients through e-mail. He also enjoys checking Facebook:

> Technology is not my thing, and it has never caught my attention. I have never gotten more than this [he shows his mobile with three music applications, WhatsApp, and Facebook]. The rest is generic of iPhone; I have never configured it. In my house, either, my sister (37) just bought, for the first time, a smartphone because she does not like to be chased, constantly available, and now her son is 10 and has a phone, too, so she was forced to enter to this [digital world]. (Patricio, 38, urban area, hybrid user)

Patricio develops an argument regarding how mobility has changed the expectation to be always available. Nonetheless, he is able to compare between instantaneity ("the mail is instantaneous, I'm always there, and I respond right away") and mobility, which he associates to "being always available and stuck [on it]; it is like an unconscious choice—I got online more often even when I don't really need to." As researchers have discussed, mobility and portability of the Internet has changed the social landscape (e.g., Humphreys et al., 2018), making it more acceptable to interact with smartphones in many social situations. However, as Patricio expresses, this portability, understood to be online by default, or, in his words, "chased," is not an affordance he values. It is part of the social and cultural ecology where intimacy and usage patterns (Ito et al., 2005) are evaluated among users, and where the opportunity to compare devices, in the case of hybrid users, is a valuable asset to decide where to stand. For instance, he prefers to interact through the computer because it provides him with a sense of freedom rather than this "unconscious choice" about being online through his phone when he feels he does not really need it. However, this "social connectivity" on the go (Campbell, 2013) reinforces, among the hybrid users, the option to opt out—to disconnect. It provides perhaps more freedom to choose devices and assigns them a role that makes sense. An example of this is Patricio's accessing social media exclusively from computers:

> For me the size of the screen is important, as I am half-sighted, it's hard for me. . . . Also, the touch, getting used to it [on the mobile], the keyboard is very small, but it's something personal, some people handle themselves amazingly with their finger and write like crazy. I like the computer more, a large screen, easy to type. It's comfort. (Patricio, 38, urban area, hybrid user)

Patricio's comparative experiences allow him to make these reflections, related to different choices for different kinds of content and activities, but also allow him to ponder concepts of instantaneity and availability with both computer and mobile phones, which are rooted in his context of access and usage (Correa & Pavez, 2016). The perceived affordances of one medium are a product of the use of another one. For example, he can compare material and technical aspects such as screens and keyboards, but also those related to check specific content. This is the case of Mauricio (47), also a hybrid user, who works as a manager. Therefore, he has secured good quality broadband Internet for both his laptop and mobile, which he also compares:

> It is everything, the telephone today is everything. . . . The computer does not compete with the phone at all; the phone is much more than your computer. However, the computer has larger size and processing capacity, but a computer does not walk around. (Mauricio, 47, urban area, hybrid user)

Mauricio, as with the most digitally included participants, thinks about which device to use according to the situation in which he is immersed in terms of location, needs, and convenience. Nonetheless, as other authors have claimed, these patterned behaviors tend to become more automatic and less reflexive over time (Ito et al., 2005). For example, people start developing a broader perspective because they have various gateways and are able to associate certain activities with specific devices, to make the most of them. As Gabriela (34) and Ignacio (19) show:

> [The main] disadvantage [of accessing the Internet on the phone] is the issue of access to content. If I compare it [with the computer], it is easier to access, easier to find the information compared with the mobile phone. It is easier on the computer to copy, to paste files. (Gabriela, 34, urban area, hybrid user)

> The computer is faster, and I have it on hand. The mobile usually gets stuck when doing transactions, for example, so I go to my laptop, which is always on. It is also better for looking up information, and you can have more programs, and if you want you can connect it to the television set, so you get HDMI and get a bigger screen. (Ignacio, 19, urban area, hybrid user)

Although mobile-only users tend to evaluate PC and laptops negatively because of their lack of or difficult portability, hybrid users assess them beyond their material features. For example, they ponder how specific activities can be carried in one or the other, the advantages of larger screens, or the simplicity to handle and search more content. Donner and colleagues (2011) warn that handsets can have limited functionality to perform some activities, such as creating a CV, because, in the beginning, mobile phones were designed to be used as part of an information ecology and to complement PCs, not as a sole mode of access.

Mobile-only users focus mostly on the availability and portability of being online because to remain connected is far more important. Smartphones are devices they have at hand, they can develop their own practices, and, in some cases, they are unaware they are using the Internet because they go directly to the apps. Furthermore, as research has shown (Katz, 2017; Pearce & Rice, 2013), the activities performed by these devices change in terms of depth and complexity. Then, if the users start their Internet access from a mobile and do not have a need—or the opportunity—to use or explore the Internet from a laptop, then, as participants expressed, incorporating a computer in future is less likely, because the mobile is fulfilling their current goals. Nonetheless, the discussion should incorporate users' needs. For instance, the type of job users have might play a pivotal role, as it could entail different digital abilities and more complex activities. Mobile-only users somehow are a mirror of a far deeper state of exclusion and vulnerability, where universal access is indeed exacerbating these gaps rather than helping to close them. Although from the surface it could be argued that mobile Internet is effectively addressing the access divide, it also may limit people's awareness of the possibilities or threats available to them online.

Conclusions

The aim of this article was to examine, from a digital inclusion point of view, the perceptions and digital practices of people who depend exclusively on mobile phones to access the Internet, compared

with hybrid users (those who us various devices to go online, in this research, laptops and computers). We gathered data from in-depth interviews of 30 adult participants with diverse backgrounds regarding age, gender, occupations, geographical context, and digital expertise. Their testimonies were accompanied by access to their mobile phones in the form of "digital tours" (Bakardjieva, 2005), an ethnographic technique that helped us to understand and contrast their narratives, actions, and organization of their digital artifacts.

The analyses suggest that people's perceptions toward mobile phones and computers shape their practices and actions. At the same time, their technological experiences and practices also set their perceptions and expectations about what it means to be online and what can be achieved through mobile phones and computers. Particularly, three major themes emerged: First, people's perceptions varied according to the different access devices. Mobile-only users valued the accessibility and portability of smartphones, expressed that through mobile phones they are part of the digital stream, and did not perceive or express major criticisms toward this technology. Hybrid users, on the contrary, offered more critical evaluations of the threats and pervasiveness of mobile phones and being constantly online. In addition, mobile-only users did not perceive differences about the depth or complexity of what could be achieved through mobile phones compared with computers and did not perceive a need to go online using a different device. Therefore, the least digitally included users tend to think that for content, PCs and mobile phones are equal. Hybrid users, on the other hand, pondered their options to explore content freely and evaluate their gateway access according to their particular goals or needs (Treem & Leonardi, 2012). Second, the "digital tours" revealed that mobile-only participants developed practices and strategies to compensate or circumvent their lack of skills (e.g., not registering phone numbers; using memory or colors to identify people; continually looking for contacts in the recent-calls section rather than a list of favorites). From the researchers' point of view, at first they looked counterintuitive. However, their context of smaller social networks, in which they have to manage a limited amount of phone numbers, contacts, or WhatsApp groups, makes their own strategies effective. In addition, these practices increased their own sense of agency (Bailey 2012; Donner et al., 2011; Wessels, 2012), expertise, and appropriation of their device to the point that they perceived no need to change them or use another device, such as a computer. Finally, these perceptions and practices have an impact on the role of the Internet in users' daily lives. For mobile-only users, for example, the smartphone has gained a prominent role in their daily life because of aspects such as portability and easy-to-use apps, which lead to more negative opinions toward the PC as well as lack of enthusiasm and perceived need to start using one. On the other hand, hybrid users are able to switch between one device and the other and compare the advantages and disadvantages of usage, which vary according to their goals and contexts (Berker et al., 2005).

Overall, this study aims to further the debate of the value of mobile Internet access. Although public policies throughout the world pursue Internet access from mobile phones as a cost-effective and speedy strategy to address Internet access, we found that when people access exclusively from smartphones, inequalities may be perpetuated. Although mobile-only use allows Internet access for people who traditionally lag behind in the digital inclusion process, the results also show that it restricts possibilities of what can be achieved online. Also, their digital practices set up a route that restricts their freedom of exploration and skills' development. In addition, we found that many users who initiate their access to the Internet from a mobile device do not perceive a need to use a laptop because they tend to view them as a

burden. Thus, incorporating a computer in the future is less likely. Although the evidence shows that a greater variety of access devices may affect the range of activities performed (e.g., Katz, 2017; Mossberger, Tolbert, & Hamilton, 2012; Napoli & Obar, 2014), these testimonies show that the gap is not necessarily about access, but is linked to people's contexts, perceived needs, experiences, and practices.

Finally, further research is needed to understand some gray areas—for instance, former laptop users that, due to their circumstances and needs, became mobile-only users and how this change affects their digital inclusion process. Furthermore, future studies could show how the different technology affordances evolve over time, as well as their impact on digital inequality.

References

Bailey, O. (2012). Migrant African women: Tales of agency and belonging. *Ethnic and Racial Studies, 35*(10), 850–867. doi:10.1080/01419870.2011.628037

Bakardjieva, M. (2005). *Internet society: The Internet in everyday life.* London, UK: SAGE Publications.

Bakardjieva, M., & Smith, R. (2001). The Internet in everyday life: Computer networking from the standpoint of the domestic user. *New Media & Society, 3*(1), 67–83. doi:10.1177/1461444801003001005

Berker, T., Hartmann, M., Punie, Y., & Ward, K. (Eds.). (2005). *Domestication of media and technology*. Maidenhead, UK: Open University Press.

Bijker, W. (2001). Social construction of technology. In N. Smelser & P. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (Vol. 23, pp. 15522–15527). Amsterdam, The Netherlands: Elsevier Science.

Boczkowski, P., & Lievrouw, L. (2008). Bridging STS and communication studies: Scholarship on media and information technologies. In E. Hackett, O. Amsterdamska, M. Lynch, & J. Wajcman (Eds.), *New handbook of science, technology and society* (pp. 949–977). Cambridge, MA: MIT Press.

Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development.* Thousand Oaks, CA: SAGE Publications.

Bryman, A. (2012). *Social research methods* (4th ed.). Oxford, UK: Oxford University Press.

Campbell, S. W. (2013). Mobile media and communication: A new field, or just a new journal? *Mobile Media & Communication, 1*(1), 8–13. doi:10.1177/2050157912459495

Correa, T., & Pavez, I. (2016). Digital inclusion in rural areas: A qualitative exploration of experiences and challenges faced by people from isolated communities. *Journal of Computer Mediated Communication, 21*(3), 247–263. doi:10.1111/jcc4.12154

Correa, T., Pavez, I., & Contreras, J. (2017). Beyond access: A relational and resource-based model of household Internet adoption in isolated communities. *Telecommunications Policy, 41*(9), 757–768. doi:10.1016/j.telpol.2017.03.008

de Certau, M. (1984). *The practice of everyday life* (S. Rendall, Trans.) Berkeley, CA: University of California Press.

de Souza e Silva, A., Sutko, D. M., Salis, F., & de Souza e Silva, C. (2011). Mobile phone appropriation in the favelas of Rio de Janeiro, Brazil. *New Media & Society, 13*(3), 411–426. doi:10.1177/1461444810393901

Digital Agenda 2020. (n.d.). *Desde una agenda digital a la transformación* [From a digital agenda to digital transformation]. Retrieved from http://www.agendadigital.gob.cl/

Donner, J. (2015). *After access: Inclusion, development, and more mobile Internet*. London, UK: MIT Press.

Donner, J., Gitau, S., & Marsden, G. (2011). Exploring mobile-only Internet use: Results of a training study in urban South Africa. *International Journal of Communication, 5*(2011), 574–597.

Dye, J., Schatz, I., Rosenberg, B., & Coleman, S. (2000). Constant comparison method: A kaleidoscope of data. *The Qualitative Report, 4*(1), 1–10.

Ensley, L. (2005). *Information and communications technological leapfrogging in developing countries of the world*. Hershey, PA: IGI Global. Retrieved from https://www.igi-global.com/chapter/technology-leapfrogging-developing-countries/14129

Esterberg, K. (2002). *Qualitative methods in social research*. Boston, MA: McGraw Hill.

Fielding, N., & Thomas, H. (2008). Qualitative interviewing. In N. Gilbert (Ed.), *Researching social life* (pp. 123–144). London, UK: SAGE Publications.

Flick, U. (2002). *An introduction to qualitative research* (2nd ed.). London, UK: SAGE Publications.

Fong, M. (2009). Technology leapfrogging for developing countries. *Electronic Journal of Information Systems in Developing Countries, 36*(6), 3707–3712. doi:10.1002/j.1681-4835.2000.tb00005.x

Geertz, C. (1973). *The interpretations of cultures: Selected essays.* London, UK: Basic Books.

Goggin, G. (2009). Adapting the mobile phone: The iPhone and its consumption. *Continuum, 23*(2), 231–244. doi:10.1080/10304310802710546

Green, N., & Haddon, L. (2009). *Mobile communications: An introduction to new media*. Oxford, UK: Berg.

Haddon, L. (2004). *Information and communication technologies in everyday life: A concise introduction and research guide*. Oxford, UK: Berg.

Hargittai, E., & Hinnant, A. (2008). Digital inequality: Differences in young adults' use of the Internet. *Communication Research, 35*(5), 602–621. doi:10.1177/0093650208321782

Helsper, E. & Reisdorf, B. (2016). The emergence of a digital underclass in Great Britain and Sweden: Changing reasons for digital exclusion. *New Media & Society, 19*(8), 1253–1270. doi:10.1177/1461444816634676

Hine, C. (2000). *Virtual ethnography*. London: SAGE Publications.

Humphreys, L., Karnowski, V., & von Pape, T. (2018). Smartphones as metamedia: A framework for identifying the niches structuring smartphone use. *International Journal of Communication, 12*, 2793–2809.

Humphreys, L., Von Pape, T., & Karnowski, V. (2013). Evolving mobile media: Uses and conceptualizations of the mobile Internet. *Journal of Computer-Mediated Communication, 18*(4), 491–507. doi:10.1111/jcc4.12019

Hutchby, I. (2001). Technologies, texts and affordances. *Sociology, 35*(2), 441–456. doi:10.1177/S0038038501000219

International Telecommunication Union. (2018). *Measuring the information society report*. Retrieved from https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2018/MISR-2018-Vol-1-E.pdf

Internet World Stats. (2018). *Internet usage statistics: The Internet big picture*. Retrieved from https://www.internetworldstats.com/stats.htm

Ito, M., Okabe, D., & Matsuda, M. (Eds.). (2005). *Personal, portable, pedestrian: Mobile phones in Japanese life*. Cambridge, MA: MIT Press.

Katz, V. (2017). What it means to be "under-connected" in lower-income families. *Journal of Children and Media, 11*(2), 241–244. doi:10.1080/17482798.2017.1305602

Klein, H. K., & Kleinman, D. L. (2002). The social construction of technology: Structural considerations. *Science, Technology, & Human Values, 27*(1), 28-52. doi:10.1177/016224390202700102

Ling, R., & Horst, H. A. (2011). Mobile communication in the global south. *New Media & Society 13*(3), 363–374. doi:10.1177/1461444810393899

Martínez, Y., Agra, S., & González, X. (2015). Triplemente marcadas: Desconexiones comunicativas en la Amazonía sur ecuatoriana [Triple marked: Communicative disconnections in the southern Ecuadorian Amazon]. *Cuadernos.info*, 36, 89–107. doi:10.7764/cdi.36.716

Mascheroni, G., & Ólafsson, K. (2013). *Mobile Internet access and use among European children: Initial findings of the Net Children Go Mobile project*. Milano, Italy: Educatt.

Mossberger, K., Tolbert, C. J., & Hamilton, A. (2012). Broadband adoption| measuring digital citizenship: Mobile access and broadband. *International Journal of Communication, 6*(2012), 2492–2528.

Napoli, P., & Obar, J. (2014). The emerging mobile Internet underclass: A critique of mobile Internet access. *The Information Society, 30,* 323–334. doi:10.1080/01972243.2014.944726

Pavez, I., Correa, T., & Contreras, J. (2017). Meanings of (dis)connection: Exploring non-users in isolated rural communities with Internet access infrastructure. *Poetics, 63,* 11–21. doi:10.1016/j.poetic.2017.06.001

Pearce, K., & Rice, R. (2013). Digital divides from access to activities: Comparing mobile and personal computer Internet users. *Journal of Communication, 63*(4), 721–744. doi:10.1111/jcom.12045

Pew Research Center. (2016, February). *Smartphone ownership and Internet usage continues to climb in emerging economies: Global report*. Retrieved from https://www.pewresearch.org/global/wp-content/uploads/sites/2/2016/02/pew_research_center_global_technology_report_final_february_22__2016.pdf

Rojas, E., & Poveda, L. (2018). *Estado de la banda ancha en América Latina y el Caribe* [State of broadband in Latin America and the Caribbean]. Santiago, Chile: United Nations Economic Commission for Latin America and the Caribbean.

Reuver, M., Nikou, S., & Bouwman, H. (2016). Domestication of smartphones and mobile applications: A quantitative mixed-method study. *Mobile Media & Communication, 4*(3), 347–370. doi:10.1177/2050157916649989

Schrock, A. R. (2015). Communicative affordances of mobile media: Portability, availability, locatability, and multimediality. *International Journal of Communication, 9*, 1229–1246.

Sørensen, K. (1994). Technology in use: Two essays on the domestication of artifacts. *STS Working Papers* 2/94. Trondheim, Norway: Centre for Technology and Society, Norwegian University of Science and Technology.

Stork, C., Calandro, E., & Gillwald, A. (2013). Internet going mobile: Internet access and use in 11 African countries. *info, 15*(5), 34–51. doi:10.1108/info-05-2013-0026

Strover, S. (2014). The US digital divide: A call for a new philosophy. *Critical Studies in Media Communication, 31*(2), 114–122. doi:10.1080/15295036.2014.922207

Subtel. (2017, December). *Novena encuesta accesos y usos de Internet* [Ninth Internet access and use survey]. Retrieved from https://www.subtel.gob.cl/wp-content/uploads/2018/07/Informe_Final_IX_Encuesta_Acceso_y_Usos_Internet_2017.pdf

Treem, J. W., & Leonardi, P. (2012). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association, 36*, 143–189. doi:10.1080/23808985.2013.11679130

Wessels, B. (2012). Exploring human agency and digital systems. *Information, Communication & Society, 16*(10), 1533–1552. doi:10.1080/1369118X.2012.715666