Resistance, Opportunities and Tensions

The Role of Children and Young People in Internet Adoption of Isolated Rural Communities

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Abstract

Chile has undergone numerous technology policy-making initiatives that have progressively diminished the internet connection gap. However, isolated rural areas are the Achilles' heel because, despite having access infrastructure, households' internet connection remain scarce. At the same time, the evidence shows that children and youth, particularly from lower socioeconomic status, may have a key role in their families' digital inclusion process. Therefore, this chapter explores the role that young people play in the digital inclusion of isolated rural families, but also the tensions that emerge in the process. Through qualitative methods that included 48 interviews and six focus groups, the findings indicate that the presence of young people at home is a relevant factor in internet adoption. However, the scenario is complex as the internet is mainly perceived as a disruptive element that threatens communication within the family and the traditional values of those tight-knit communities.

Keywords: children, young people, digital inclusion, rural communities, internet

Introduction

Young people are migrating from rural communities, which is problematic in many ways. From a media and communication perspective, research has suggested that children and young people are the ones that enhance the use of new technologies among their families. For example, they have the tendency to influence parents as well as other adults to get acquainted with the internet, which is more frequent in vulnerable contexts and among lower socioeconomic status households (Chu, 2010; Correa, 2016; Katz, 2010). This generational gap is particularly evident in vulnerable contexts because young people

are usually more exposed to new ideas, including technology, through their school and friends and may become an entry point of these into the community (Kotilainen & Arnolds-Granlund, 2010). This is even more relevant in isolated rural communities, which are in a more disadvantaged position than their urban counterparts (Liao et al., 2016; Park, 2017). On this regard, access to the internet and digital opportunities go hand in hand, and it could be a way to tackle unequal distribution of resources. This is why rural populations have been largely identified as a target by digital policy-making agendas across the world in an effort to further their economic and social development by providing them access to resources such as communication and information, among other things (LaRose et al., 2011; 2012).

Yet, isolated rural communities continue to lag behind (Townsend et al., 2013) in part because their day-to-day is placed in a different and isolated context, where most of them are employed in manual jobs such as farming, fishing and mining, which lower the chances of being exposed to digital technologies (Park, 2017). Furthermore, because they conduct their daily activities in secluded areas, surrounded by a geography that somehow outlines a mentality of isolation, people are more likely to fear new situations by increasing their reluctance to try new things (Correa & Pavez, 2016). Furthermore, precarious roads and almost nonexistent public transportation have also a direct impact in both their quality of life and access to services, such as health facilities and, more importantly, education. The latter is one of the main reasons why children and young people are forced to migrate to larger rural or even urban areas if they wish to continue their formal education. This phenomenon, which is known as the "brain drain effect" (Petrin et al., 2014), has a greater impact on the social and economic development of these communities. Moreover, this highlights the key role that young people plays in the digital inclusion process of these communities as they bring new technological needs and ideas to their homes.

Digital inclusion in rural Chile

Isolated communities in Chile offer an interesting scenario to study this phenomenon. The country has one of the highest connectivity rates of the region (Pew Research Center, 2016) and household internet access has risen from 61.6 per cent in 2013 (Rivera, Lima & Castillo, 2014) to 87.4 per cent in 2017 (Subtel, 2018). This is in part result of a consistent governmental digital agenda, which has targeted, among other populations, rural areas. One of these initiatives was the public policy program All Chile Connected, in which antennas for 3G internet connection were installed between 2010 and 2011, providing first-time internet access to isolated rural communities. This policy aimed to connect the last digitally-excluded territories, helping the country to achieve 90 per cent of internet coverage (Subtel, 2016). However, since the access infrastructure was provided, just a small percentage of inhabitants have become internet users. In fact, 63 per cent of them have never used it and 61 per cent of households are still disconnected (Correa et al.,

2017). Although social, cultural and economic circumstances tied to the particularity of their isolated context help to understand this reluctance (Correa & Pavez, 2016), two aspects stand out. First, 50 per cent of the households do not have members under 30 years old and the population is aging. Second, one out of four people who have used the internet report that their children taught them how to use it. Therefore, the objective of this chapter is to further explore the role played by children and young people in the digital inclusion process in isolated communities that have recently received internet access infrastructure. It also aims to provide an insight of what the opportunities are, as well as the tensions and challenges of this process in these rural settings.

To investigate this phenomenon, we rely on qualitative data that come from 48 ethnographic interviews in ten isolated communities throughout northern, central and southern Chile, as well as six focus groups in three communities with different levels of internet adoption, named La Población, Los Maquis and Puerto Fuy. At first glance, the data gathered indicated that participants identified children and young people as reaping the most benefits from this access infrastructure. These children and young people were determined to be tech savvy, appropriating technology particularly for educational and entertainment purposes. Although this was expected, we also found a more nuanced and complex scenario: the internet infrastructure, a sign of progress allowing these communities to connect for the first time, also faced high levels of uncertainty. Tensions and resistance emerged from the diffusion and domestication of the internet.

A laptop in the kitchen: How educational policies further technology in rural areas

Evidence has consistently shown how valuable young people's internet usage is for family members as they act as internet socializing agents (Ito et al., 2009; Livingstone et al., 2013; Livingstone et al., 2014). In vulnerable families, it has been emphasized that one of the most relevant factors that has a direct implication for the digital inclusion of the home is the presence of children. This is mainly because of the educational needs. In a representative survey of isolated rural Chilean households, 75 per cent of those with household connection argued that one of the main reasons for acquiring internet was to provide support for their children's education (Correa et al., 2017). Furthermore, in the interviews participants agreed that boys and girls were clearly in a disadvantage if they did not have internet access at home.

Two relevant public policies that were consistently mentioned by families when doing field interviews were I Choose My PC and My First Laptop. Promoted by the Chilean Ministry of Education since 2009 to date, they provide computers with free internet access for one year to students with the highest grades. In a national impact assessment study, 87 per cent of the children benefited with this policy stated that "the arrival of the computer has been a great help for my family" (Mineduc, 2013: 256). Figures also indicate that the computer served as a gateway for younger siblings, fathers and mothers

who had previously shown no interest or had no opportunity to access technology in their home. In these households, 65 per cent of siblings, 50 per cent of mothers and 38 per cent of fathers took advantage of this new access and used the computers for work, study, entertainment and communication (García et al., 2009). This was also the case for the families from these isolated communities, as for many of them it was the first time they would have a laptop in the household, which provided the opportunity for other members to explore and become familiar with the technology.

What happens with age is that for us, *the internet* arrived very late. For [the young people in the room] it is easy to find any tool [...] Doing it yourself gets complicated, hopefully we know how to turn it on and off. In fact, I sometimes have to go and get the little grandson to help. The resulting feeling is why have we not become more familiar [with the internet] before. (Javier, age 59)

For example, participants reported how adults were somehow included in computer use, which was facilitated by the constant presence of the device in a common family area such as the kitchen. There, children would deliver the first guidelines for the development of digital skills and information search that was relevant to their parents in their occupations as farmers, artisans and small tourist entrepreneurs. They benefited from this access to technology in a variety of ways, even if they had never used a computer previously. For example, to seek relevant information as the case of a farmer woman who never used a computer of any kind until her granddaughter arrived with a laptop to the home:

I was taught to use it [the computer] but it scared me. I have my page [on the Facebook website], they created it for me and I have it there, so I have Facebook but I do not understand a thing. Every so often I say [to her granddaughter] "Please check my Face." I had a lot of friend requests! [laughs] (Carmen, age 48)

Although Carmen cannot be considered a skilled and regular internet user as such, and admits to be scared of it, she has a social media account. Still she has taken a first step, spending time together with the child on the computer. As was later clarified, the child also helps her to look up information that is relevant for her. Although this digital inclusion process is by no means a straightforward one, somehow these situations allow technology to become part of everyday life, as children and young people find opportunities for their parents and the seniors of the house to familiarize with it or even obtain benefits from its use. This is highly valued by adults that encounter this kind of technologies in a familiar and protected setting as the home. Despite the fact that they need to ask for help, the tendency is for them to explore it in order to follow their interests and needs, such as to look for health information, to apply for financial help, and also to make use of social media in order to increase the extent of communication with people outside the community. This is an informal yet a more familiar setting compared to a formal course. In some cases, assistance from children can be crucial when they have ventures, as for example an adult woman in Puerto Fuy, who has two

daughters of 13 and 17 years old, and recently had installed a cabin next to their grocery business to receive tourists during the summer. In the interviews she commented that:

My daughters have one [website], they made for the cottage, it has a page. Yes, they know the drill, kids nowadays are born with the phone, the computer and all that. My eldest daughter, she handles the internet very well [...] it is like another life for them. (Teresa, age 47)

As in this case, children execute activities that parents request and that can be beneficial for their undertakings. Nonetheless, parents also reported to often feel at a disadvantage in terms of technological skills. When children take on the task of teaching their parents, adults described these encounters as mainly uncomfortable, with children growing frustrating and losing patience quickly. For example, a man that has invested in a computer for the home shared in one of the focus groups that:

I ask my daughter to help me and she says "noooo" and complains that I should be the one learning how to do it. Then she starts to teach me but it goes so fast, from one thing to another, just one time and really fast. That is bad, they have no patience and one also gets angry and then explodes and each one goes by their own way. (Pedro, age 44)

It was common that parents expressed a great dissatisfaction at their inability to keep up with the children, which resulted, especially for non-users, as a reinforcing mechanism for insecurities and fears that the internet evokes in the first place.

Children learn best

As it was stated in the survey (Correa et al., 2017), the educational support of their children was usually confirmed in interviews and focus groups as one of the main reasons to have internet connection at home. In a context of limited educational facilities, where rural schools usually only have one to two teachers and only provide primary education, which force children to migrate to boarding schools at an early age, education is a central theme in families. This is why both internet users and non-users agreed on the advantages for children and young people to access it from their homes. Phrases such as "children learn best" or "it is the only way to do the homework they get in school" were mentioned, yet it was often stressed that the lack of technology placed them at a disadvantage. This is also highlighted by the rural geography, where absence of transportation, schools located relatively far away from children's homes, and harsh weather increase the challenges to return to school during the day in order to complete homework.

Yet education is not the only aspect of it, because close and tight networks are perceived as strengths in these localities, creating a sense of familiarity that shelters them from feeling excluded or isolated (Pavez, Correa & Contreras, 2017). Thus, as expected,

communication is an issue that takes special relevance in rural contexts (Rusten & Skerrat, 2008), particularly in these localities where transportation possibilities are scarce and highly dependent on the climate. Therefore, communication advantages were of special interest for parents who wanted to keep in contact with their children who migrated at the age of 12 to 13. Thus, the richness that multimedia communication delivers is highly valued. For example, a young woman in Puerto Fuy commented on one of the focus groups that "one sometimes needs to see the person's face, not only hear the voice. Because after so much time away we forget the details". Another participant of the same community said: "It is different when one sees the face, as when they call [and say] 'aunt, something happened to me and I do not know what to do". As unusual as these circumstances may seem, they are part of a context of isolation where the ability to have multimedia communication by sharing photos and videos over social networking sites were very much valued. In fact, the need for communication was expressed by all participants, as a way to maintain contact with family and friends that live outside their community.

Addiction and the threat of traditional values

Children and young people were pointed out as the ones that use the internet the most in these localities. Participants account how in public places where there is access to Wi-Fi or in schools during recess, minors jumped into their laptops and play online videogames or check out social network sites. Also, in the northern community of Alto del Carmen, in winter or when the weather hampered signal quality, adult interviewees recounted with oddness how they witnessed a group of young people climbing the hill where the antenna is located in order to find a better signal.

Although this greater extent of use may strengthen the virtuous circle where greater access results in increased skills and decrease of fear and anxiety among older adults (Pavez et al., 2017), the fact that children tend to go faster in learning digital skills is not always perceived as a positive aspect. A teacher from La Población explained:

I work in a one-teacher school, I have to do everything, I teach technology as well, but I have to admit that one sometimes remains as digitally illiterate in relation to children because children learn so fast, and sometimes they know more technology than oneself. (María, age 41)

In this testimony two issues are important to highlight. The first relates to this increasingly established social belief that age is synonymous with digital skills. That is, for all participants of this research, there is a perception that children and young people in their communities have innate technological skills and make better use of the internet. Although this could be argued as a result of the greater exposure to it, it is relevant to mention that in these communities this perception of knowledge is usually received with fear. Fear of what they could encounter on the internet – a network mainly de-

scribed as "no man's land" – fear of what they could do and, particularly, fear for them to become addicted. This was especially present among non-internet users, where most of their beliefs were fueled by rumors and not by direct experiences (Pavez et al., 2017). Furthermore, based on their experiences with young tourists, visitors or people outside the community, participants described outsiders as "fixed to their phones". Usually they would take distance from this situation and dread to follow the same pattern, as one participant commented:

For me it [the internet] might be harmful, it would not do me any good, because there are people who are looking at their phones, fixated to them and not working. It's a joke. Imagine, you are here talking and people are only looking at their phones [...] It is a vice, they become addicted. (Ramiro, age 52)

They also reported to feel mainly puzzled by the high level of use of mobile phones by others and how these technologies were present in almost every encounter. For instance, a participant from Puerto Fuy described that her 17-year old son, after working in a city, returned "changed, as he was no longer my son". For this woman, the rituals of the family dinner were very important and she was horrified that her son would bring the mobile phone to the table and use it while his parents ate with him. A 46-year old man explained how, in an attempt to improve communication with his teenage daughter, hide the mobile's charger, with the hope that his daughter would lose interest of it. These testimonies speak about how, in localities where smartphones with internet access are just breaking, people fear that technologies are taking over their family life as well as how much they value face-to-face communication. Therefore, their discourses tend to develop the idea of traditional values being threatened by young people that are too caught up by technology. Therefore, in communities like these, with cohesive social networks, where respect and solidarity are of high significance, children and young people are seen to be going in the wrong way. Thus, technology, especially in the case of non-users, tends to be demonized and identified as a disruptive element that threatens these values (Pavez et al., 2017). These perceptions are also more persistent among those who lack first-hand experiences with the web due to almost non-existent public initiatives that would help them to explore the web in a way that could be meaningful for them or in tune with their daily life and needs.

Conclusions

Children and young people play a key role in the digital inclusion process of rural communities. These are localities that face a high level of isolation, migration of the youth and aging of the population, which become a major obstacle to internet adoption. Moreover, participants in this research – particularly non-users – tend to be afraid of the impact of this technology, arguing that internet use leads to addiction, access to improper content and even threatens face-to-face communication (particularly mo-

biles). However, this is a complex scenario because there is also awareness that it is an educational tool, particularly to overcome pre-existing disadvantages. In fact, previous research has shown that educational support is the main reason for having household connection (Correa et al., 2017). Families facing the migration of their young children to boarding schools also see it as a valuable communicational tool. Adults benefit from being incorporated into the digital world, for example social media, as it increases their connection with family and friends living outside the community. In some cases, they also take advantage of the internet as a way to promote their ventures. However, low rates of internet usage still persist, as those most likely to use it continue to migrate. Additionally, depending on the cultural context of the community where the technology is being introduced, the internet can be perceived as a threat to that community's traditional values, thereby hindering its appropriation. Therefore, the question that remains is how to promote the opportunities that are brought by internet usage and also how to take advantage of this new infrastructure and other instances of access at home, positioning it as more than an educational tool but also as a way to further the social and economic development of the families and their isolated communities.

Note

It is worth mentioning that Chile is a country that has stood out as one that has consistently implemented a series of public policies aimed at providing digital infrastructure and equipment, particularly among children and young people. Moreover, the public-private efforts of the last decade that have been equipped with access infrastructure and focused on mobile connection are achieving an unprecedented increase in internet penetration in the country.

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Acknowledgement

Data collection of this research was funded by the National Fund for Scientific and Technological Development (Fondecyt No. 1140061) and the data analysis and writing process was supported by Fondecyt No. 1170324.

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