

Article

The Power of Emotions: The Ethics of Care in the Digital Inclusion Processes of Marginalized Communities

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Abstract

Digital inclusion research has focused on the conditions, practices, and activities necessary to ensure that all individuals and communities, including the most marginalized populations, can access and use digital technologies. The complexities of Internet appropriation that enable digital inclusion have traditionally been approached from a macro-level perspective that focuses on access infrastructure policies. Although motivations and social, economic, and cultural capital have been part of the analysis at the individual level, there are still questions about how this process unfolds at the community level. Specifically, little is known about how dynamics and interactions among marginalized groups with weaker online skills and limited Internet access influence technological appropriation. The ethics of care offers complementary insights into this phenomenon, allowing scholars to look at how emotions can trigger actions that lead to the technological involvement of those on the digital periphery. Drawing on 71 in-depth interviews conducted in person with Internet users in 16 rural and urban communities in Chile, we discuss how care sets the stage for organizing, helping, and teaching others. Our results show that emotions such as empathy, powerlessness, and frustration were vital to giving and receiving forms of care that facilitate digital activities. The findings also suggest that digital assistance is more prevalent in tightly-knit marginalized communities with more trusting communication patterns.

Keywords

digital inclusion; emotions; ethics of care; Internet; rural communities; urban communities

Issue

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1. Introduction

Digital inclusion research has focused on the conditions, practices, and activities necessary to ensure that all individuals and communities, including marginalized populations, have access to and use digital technologies (National Digital Inclusion Alliance, 2017). A strong line of earlier research has focused on how people’s social relationships and networks are key factors in the distribution of digital resources that can be used to meet their needs (Mesch, 2012; Straubhaar, 2012). However, the

complexities of the process mainly impact groups with weaker online skills or limited technological access, such as dated devices or unreliable Internet signals that lead to fraught online experiences (Donner, 2015). These relational theoretical perspectives could be strengthened by considering how emotions, values, and moral practices shared by community members could trigger actions that increase the digital involvement of those left behind. Members of communities that have been deprived of economic, social, or cultural opportunities develop emotions such as frustration or a sense of empathetic

responsibility and care for one another (Nemer, 2018). Research has shown the importance of people who act as intermediaries—also called digital brokers (Katz, 2010)—in developing online skills and confidence. For example, formal and informal leaders in communities, neighborhoods, and families often provide key help and assistance (Francis et al., 2018). However, there is still a need to deepen our understanding of the role of emotions in giving and receiving digital help within communities.

The ethics of care, a concept rooted in moral philosophy and feminism, and characterized by a concern for building and sustaining individual welfare and good relationships, offers theoretical insights into the role of digital inclusion in marginalized communities (Slote, 2007). This framework sheds light on how situations or contexts can elicit emotions and empathy among community members that contribute to the development of relationships by connecting with others and providing and receiving care (Ciulla, 2009). Given that care “begins with an assumption of human connectedness” (Tong, 1998, p. 131), the emotions experienced by community members form the basis for triggering the ethics of care and the creation-maintenance of networks in communities where digital technologies are facilitators. This perspective focuses on how and why people help, listen to, and connect with others (Gilligan et al., 1994). The theoretical underpinnings of this study combine the ethics of care and digital inclusion to contribute to the understanding of how care sets the stage in the digital arena for connecting, organizing, helping, and teaching others. In this article, we explore the role of emotions in digital inclusion processes through the lens of the ethics of care based on 71 in-depth interviews conducted in person with Internet users in 16 rural and urban communities in Chile.

This study contributes to the existing literature on digital inclusion by examining the intersection of the ethics of care and digital adoption within marginalized communities. Unlike the conventional one-to-one approach employed in the ethics of care, it extends to a meso level. As such, it considers the social and economic context, perspectives, and experiences of communities, recognizing them as crucial factors in understanding their approaches to technology. This study is situated in the aftermath of the Covid-19 pandemic, which also informs how these communities are impacted in terms of seclusion and emerging digital needs. By considering such experiences, this article expands the current understanding of digital inclusion by examining the role of emotions, care, and the community’s socio-economic capital in a vulnerable community context, offering valuable perspectives and contributing to the literature in this field.

2. Theoretical Framework

2.1. Social and Digital Inclusion

Given that digital inequalities mirror structural social inequalities, much of the literature on digital inclusion

has relied on relational or network approaches to explain the distribution of different types of resources, including digital technology appropriation and its outcomes (Helsper, 2021). For instance, van Dijk (2012) proposed the resources and appropriation theory, a relational or resource-based approach to understanding digital inclusion. Van Dijk’s main argument is that social inequalities are related to people’s social ties and relative position to one another in a given society (see also Wellman & Berkowitz, 1988). This relational framework proposes that people’s personal and positional categories in society and the distribution of resources explain digital media access and use. Personal categories are related to individual properties, which are in turn linked to social or identity constructions (e.g., gender, generation). Positional categories refer to people’s positions in a community and are based on elements such as their occupation or education. These positions are linked to differences in the distribution of resources or capital, which are defined as the means to reach particular goals. Material and social resources such as social network positions and relationships shape digital media access and use. An earlier study conducted in isolated rural villages in Chile that was based on this same theoretical perspective found that social resources—that is, the presence of children in the household and larger social networks—were the main predictors of digital connection (Correa et al., 2019).

Similarly, based on Bourdieu’s (1986) idea that different forms of capital are key to understanding social mobility and inequality, scholars have proposed that economic, cultural, and social capital such as assets, education, and networks are key to understanding the formation of technological capital, that is, technological capabilities and know-how (Straubhaar, 2012). Following similar theoretical inspirations such as network theories and social capital, the social diversification hypothesis (Mesch, 2012) proposes that the geographic and social segregation observed in multicultural societies precludes minority or disadvantaged groups from forging and developing interactions. Computer-mediated or mobile communication provides a platform for overcoming this barrier. This means that the Internet allows members of disadvantaged groups to expand their social circles, activating the bridging function of social capital. This theory also suggests that the Internet helps members of the majority or more powerful groups to maintain their social ties, activating the bonding function of social capital. If we apply this theoretical argument to this study on isolated rural villages that are socially and geographically segregated, we could argue that online connection is key for overcoming isolation, as it is fundamental to understanding the social processes that further digital inclusion.

These frameworks describe and analyze digital inclusion as a complex process that involves more elements than access to infrastructure (see Helsper, 2021). They also acknowledge the fact that users (individuals) are

part of a context compounded by specific social, cultural, and economic elements. In this situated access and use of technologies, social ties are critical to understanding how the digital process unfolds. For example, Francis et al. (2018), who explored how older people cope with technical difficulties, found that older adults reported that they enjoyed asking for help to strengthen their social ties with their families. The emotional support provided by their family members motivated them to incorporate technological devices into their lives. Similarly, Katz (2010) studied how a sense of empathetic responsibility shapes how immigrant children behave as technological brokers in their homes, connecting their families with local and learning resources. These results suggest that the ethics of care provides a useful and underutilized theoretical avenue by considering the role played by emotions, values, and moral practices in analyzing the role of digital inclusion in marginalized communities.

2.2. *The Ethics of Care*

Four decades ago, feminist theorist Carol Gilligan suggested in the monograph *A Different Voice* that many moral decisions and practices are based on both principles of rights and/or justice and responsibilities and care (Gilligan, 1982). This was the beginning of the development of the ethics of care, an approach that emphasizes the relational and interdependent aspects of human beings and communities (Slote, 2007). Furthermore, it recognizes that individuals are dependent on others during many periods of their lives and that developing caring relationships allows people to live and progress (Held, 2006). The literature shows that in this kind of process, people develop emotions such as frustration or a sense of empathetic responsibility and care for one another (Williams, 2001; Zembylas, 2010). Although the approach focuses on how individuals meet the needs of others who might be more vulnerable by helping, listening, and connecting with them (Gilligan et al., 1994), we are now extending this rationale to the analysis of the process of digital inclusion and the role of technologies as goals or as means to achieving goals.

Although the ethics of care continues to be used as a theoretical framework, it has faced persistent criticism. For example, some scholars have pointed to issues such as the theory's perceived ambiguity and narrow scope of application (e.g., Crigger, 1997; Paley, 2002). However, this approach provides another layer of analysis to look at marginalized and tight-knit communities that have been deprived of economic, social, or cultural opportunities. It also allows scholars to recognize the new opportunities provided by access to and use of digital technologies.

Our work in this field began by looking at how members of communities develop trust, which is a key component of building social capital and forging strong and healthy ties in a community (Purdue, 2001). The ethics of care relies on it, as this perspective values the ties we

develop with other individuals as constitutive of part of our identity (Williams, 2001). As such, trust and mutual consideration are basic elements of a caring relationship (Held, 2006).

Similarly, empathy is a precondition of care (Slote, 2007), as feelings play a key role in this process (Pulcini, 2017). Most of the research that has been conducted on the ethics of care has centered on empathy as a crucial factor in the provision and receiving of care (Held, 2006). Following Stein's (1917/1989) seminal work, empathy is defined as involving how we perceive and understand another person. It inspires an arousing feeling in us as we become aware of and acknowledge others' feelings while recognizing the difference between ourselves and other individuals (Gurmin, 2007). While Pulcini's (2017) work relies on empathetic emotions as drivers of care, Held (2006, p. 10) asserts that "even anger may be a component of the moral indignation that should be felt when people are treated unjustly or inhumanely, and it may contribute to (rather than interfere with) an appropriate interpretation of the moral wrong." This negative feeling might eventually trigger care as well. However, Pulcini (2017) tries to move the discussion forward by proposing that different emotions motivate different forms of care, noting that relationships are key to understanding how we care for someone with whom we have a personal connection (e.g., family, friends, neighbors), which is different than caring for unknown people who are vulnerable through, for example, paid, unpaid, or volunteer work. An example of this in the context of technology is Nemer's (2018) work on how community technology centers (CTCs) were used by disadvantaged communities in Brazil. The study showed how CTCs, which were defined as social gathering spaces, promote care among users, workers/owners, and the community. CTC users visit these spaces to access the Internet and develop social ties characterized by empathy, compassion, and solidarity. Students help each other with their homework, workers help users to pay their utility bills, and community members socialize. In other words, the research showed that people did not only use the CTC to access the Internet. Their main purpose in visiting these spaces was to feel that they are part of the community and to give and receive help when necessary. Following this line of research, but on a different scale and context, in this study, we look at the influence of care in the development of digital engagement based on ties among marginalized community members in urban and rural settings. We pose the following research questions related to our exploration of digital inclusion processes in marginalized communities:

RQ1: How do digital technologies facilitate the process of caring through connecting, organizing, and teaching others?

RQ2: How do people provide-receive care through digital technologies in marginalized communities?

3. Methodology

3.1. *Marginalized Communities in Chile*

Chile is the longest and narrowest country in the world. It has a population of 19 million and Internet penetration of over 85% (SUBTEL, 2021), one of the highest rates in Latin America (ITU, 2021). This is mostly due to public policies that have promoted geographic coverage and mobile connections. For example, the Telecommunication Development Fund subsidizes mobile connections in lower-income and isolated geographic areas (Digital Regulation Platform, 2020). However, this country's geography presents a challenge for internet access infrastructure and signal quality because its unusual shape does not allow for alternative connection paths (NIC Chile & Universidad de Chile, 2018). Furthermore, the Andes Mountains run alongside the entire country, which makes it difficult to build redundant telecommunications infrastructure. The current design of Chile's infrastructure serves major urban centers rather than rural localities (Galdames, 2021). Despite widespread connectivity, the prolonged periods of confinement experienced during the recent pandemic revealed various challenges related to access and signal quality.

Approaching digital inclusion from a community perspective requires understanding aspects of that community (Geertz, 1973), such as how residents organize, which resources they can access—e.g., public services, transportation, schools, and work—and the advantages and challenges posed by the local geography, which is inevitably linked to the quality of their Internet signal. Although these situations can be measured or reported, experiencing them as a researcher provides a deeper understanding of how participants live their lives. For example, one can truly understand what it means to live in a remote community after spending two and a half hours driving on an unpaved road in the middle of a desert with no internet signal, no other cars in sight, and a complete lack of road signs. Some villages are separated by lakes and connected only by hilly, winding roads. Local residents are forced to pay up to US\$10 to ride in a neighbor's car for three kilometers because there is no public transportation for traveling short distances. In the case of urban communities, researchers experienced what it is like to walk through a neighborhood with no street names, fences encircling all of the houses, no children playing outside, and very few people in the streets. This is consistent with how other reports have described what a marginalized urban community looks like in Chile (Rasse et al., 2021; UNDP, 2017). Despite the prevalence of these increasingly lonely marginalized urban neighborhoods in Chile, it is important to acknowledge that this study does not aim to represent all rural isolated or urban vulnerable communities across the country due to its qualitative nature. Instead, its primary purpose is to capture specific and context-bound experiences that can offer valuable insights for addressing the research

questions. We chose this perspective in part because social situations and digital decisions are informed by contextual and individual elements that are more easily grasped in the natural environment where they are enacted (Rosenblum, 1987). We conducted face-to-face interviews in an effort to give participants a voice (Kvale & Brinkmann, 2009) and to interact without the mediation of technology—which is important in this case given that the level of sub-par Internet connections and taxing online experiences is one of the topics covered.

3.2. *Community Selection and Participant Recruitment*

The goal of this study is to address the perceptions and experiences of members of marginalized communities. As such, we selected rural and urban low-income villages with limited access to resources such as the Internet, as the literature suggests that this impacts their broader social and economic spheres (Bagga-Gupta, 2018; Donner, 2015). We traveled to 11 rural isolated communities and five urban neighborhoods throughout northern, central, and southern Chile over nine months in 2022. The selected rural communities gained access to the Internet ten years ago through a private-public policy that subsidized 3G mobile connections in secluded areas with limited or no connectivity.

The five urban centers were chosen in the same regions as the rural villages. These serve as the main urban centers for those communities and play an important role in residents' everyday lives. We relied on socioeconomic information provided by city councils to identify vulnerable neighborhoods in each location (see Table 1).

We used a three-stage ethnographic approach (Bernard, 2006) to recruit participants. First, we scheduled interviews with local leaders such as the presidents of neighborhood and seniors' associations, members of informal youth groups, and teachers who play the role of gatekeepers in these communities. All of them were interviewed in their homes, workplaces, or gathering places. Once in the community, we approached people who worked in local businesses (e.g., grocery stores, restaurants, beauty salons) or in an official capacity as extensions of municipal offices. We then used snowball sampling, asking interviewees to help us access hard-to-reach participants. The goal was to cover demographic-relevant areas that are consistent with the objectives of the study and to ensure that it reflects a diversity of experiences and voices. Thus, participants' characteristics vary in terms of gender, age, and occupation, and they have different levels of Internet access and use. Despite this diversity, we were able to map out their connections to the community, identify patterns, and understand how they interact at the social and technological levels.

3.3. *Procedures*

This project followed an ethical protocol developed by the institution of the principal researcher (N.015-2021)

Table 1. Communities visited for this project.

	Zone	Geographic area	Economic activity	No. of women	No. of men	No. of children
Locality No. 1	Northern	Rural	Fishing	3	4	2
Locality No. 2	Northern	Rural	Mining	4	1	0
Locality No. 3	Northern	Urban	Mining and agriculture	4	1	0
Locality No. 4	Northern	Rural	Agriculture	6	5	0
Locality No. 5	Northern	Urban	Mining, fishing, and tourism	1	2	0
Locality No. 6	Northern	Urban	Commerce, construction, and mining	2	0	0
Locality No. 7	Central	Rural	Agriculture	3	2	1
Locality No. 8	Central	Rural	Agriculture	4	3	0
Locality No. 9	Central	Rural	Agriculture	0	1	1
Locality No. 10	Central	Rural	Agriculture	1	0	0
Locality No. 11	Central	Urban	Agriculture	1	1	0
Locality No. 12	Southern	Rural	Fishing and tourism	3	1	0
Locality No. 13	Southern	Rural	Silviculture and tourism	2	2	0
Locality No. 14	Southern	Mixed	Silviculture and agriculture	2	3	0
Locality No. 15	Southern	Rural	Silviculture and agriculture	1	1	0
Locality No. 16	Southern	Urban	Silviculture and commerce	1	2	0

which included a signed informed consent form. In the case of minors, the protocol included an informed consent form signed by the participant's parent or guardian and an assent form for the children. The three authors conducted 71 unstructured and semi-structured interviews lasting between 35 and 120 minutes. All of the material was audio-recorded and transcribed. The participants' names and specific locations were omitted to protect their privacy.

Using a hybrid thematic analysis that combined deductive and inductive approaches (Fereday & Muir-Cochrane, 2006), the researchers developed a coding scheme that incorporated the main concepts from the literature and emerging themes from the fieldwork. All transcripts were assigned specific codes based on the main themes and subthemes, which included community and personal access to the Internet, digital routines and struggles, discourses, process, identification of digital helpers or enablers, and emotions related to the process.

4. Results and Analysis

4.1. The Role of Emotions in the Process of Digital Inclusion

Communities can play a key role in addressing conditions such as limited Internet access and related experiences. This is particularly true in rural areas, where villages are recognized for their main productive activity, such as tourism, fishing, forestry, agriculture, and mining. Each community's main productive activity condi-

tions the level of digital access and skills needed by residents. This is also informed by the social context, such as a pandemic, where there is a greater need for information and an increase in physical isolation, which affected normal economic and educational activities on different levels. Furthermore, the experiences of tightly knit rural communities exemplify how emotions such as frustration, rage, compassion, and empathy inspire leaders and neighbors to connect and organize to provide and receive care.

For example, one of the communities included in our study is a fishing village with a year-round population of less than 300. During the summer, people from nearby cities who have built informal cabins and camps on the hill flock to the village. The number of seasonal residents has exploded over the past few years due to the pandemic and lockdowns. At one point, its population tripled in just one year, mainly because people who had left the village returned to spend lockdown periods near the sea. Furthermore, it was common knowledge that regulations were not monitored as carefully there as they were in large cities, so people believed that they would be able to walk around town freely despite the quarantine rules.

The community had limited electricity infrastructure and Internet access as recently as ten years ago. Over time, people have gotten used to the advantages of online activities, especially social media and streaming services. The pandemic changed everything. The population grew from 300 inhabitants to over 2,000, and this had consequences on the connectivity front. In addition to seasonal residents, young people who usually lived elsewhere to attend university and children who

attended school outside of the village returned, as they were forced to continue their education online. This population surge and increased need for digital access impacted the quality and strength of the Internet signal because the town shares a single 3G antenna and has access to only one provider.

This situation affected the majority of the urban and rural locations visited in the context of this study. Participants expressed frustration, claiming that the digital service, which was insufficient most of the time, had become impossible to use. The situation was particularly dire for residents who needed to use the Internet connection to work remotely. For example, Jorge (27) was forced to return to his rural village during his final year of school. He reports that he “gave up” on the engineering program he had enrolled in because he could not connect to Zoom for his classes or download course materials. He even tried to do so late at night when fewer people were online, but it didn’t work, so he took a leave of absence. This kind of situation was common among participants, as university students were forced to return to their rural homes due to Covid restrictions and school closures. They expressed how difficult it was to study online because of signal limitations. However, the reasons varied. Urban dwellers tended to hold the government and Internet companies responsible. Others claimed that newcomers were the cause of problem. Jorge’s mother shared his frustration: “This is the newcomers’ fault....The village doesn’t function well with so many people.”

Other participants from rural and agricultural communities, which also received new residents during the pandemic, also reported signal quality issues. The principal of one of the local schools even received requests from residents to share the WIFI password for a signal that was exclusively for the use of local students. In some urban neighborhoods, particularly in the north of the country where the mountains are more prominent, some participants are unable to communicate even by phone, and it could take hours to download WhatsApp and social media messages, forcing people to restart their phones several times a day. The signal problem is even worse when the device is a computer, as in Jorge’s case. Although these problems are widespread, only one community organized to take action against the Internet service provider as complaints started to pile up and a shared sense of helplessness and neglect grew. The literature suggests that anger is also a trigger for care because people feel that they have been treated unjustly, interpreting this as morally wrong and seeking to change the situation through care (Held, 2006). In this case, the unbearable connectivity situation was one of the reasons Sebastián (49), a former electricity company worker, decided to run for president of the neighborhood association:

People feel rage. We have filed class action suits against the company and the telecommunication office over this poor connectivity. We joined forces

a year ago, and we have received over 90 refunds. The whole community came together. They weren’t paying attention, so we knew we had to do it together.

The evidence shows that empathetic responsibility and care for one another (Williams, 2001; Zembylas, 2010) can trigger this kind of action. Sebastián spends his time going door-to-door to meet with his neighbors, taking note of the issues that they are facing, and helping when needed. Despite the signal problems, he created a WhatsApp group to provide a communal space for sharing messages:

We have 132 members, almost half of our population. You can list anything you want that could be used to help others, such as fresh bread for sale, good night wishes, a note saying that a puppy is lost...anything.

This group also helped them to organize other actions that can be considered acts of care despite their nature (Gilligan, 1982). For instance, when people started complaining that foreigners were responsible for an increase in Covid cases, the community voted to stop people from entering the village. They built a barrier at the entrance to the town and organized the work required to keep others out through the WhatsApp group. Entire families took day-long turns to stop visitors from coming in.

4.2. Providing and Receiving Care Through Digital Technologies

In the ethics of care literature, empathy serves as a driver to start actions that help others, and through them, acknowledge their experiences, differences, and needs (Gurmin, 2007; Held, 2006; Stein, 1917/1989). In the case of community leaders, identifying digital or technology needs can be a useful tool for organizing previous care work. We observed this dynamic in the case of Elvira (72), a well-known elderly resident of one of a lower-income neighborhoods in southern Chile. As a former president of the neighborhood association, she introduced the street light system and, more recently, led efforts to pave two main streets. She is also part of a WhatsApp group called “Friends With Food.” The group is comprised of seven women from the neighborhood between the ages of 66 and 75 who engage in volunteer work in the community. Since the beginning of the pandemic, they have organized meals for neighbors in need, many of them undocumented immigrants living in a camp who are not welcomed by the rest of the community. These women used the WhatsApp group to organize help for them during the public health emergency. This kind of communication and organization was common among neighborhood associations and volunteer groups during the pandemic, particularly in urban communities where tighter restrictions were in place. However, this did not come easy to many of the communal leaders. Susana (53), the president of a union, explains:

Before the pandemic, people were resistant to using technology like WhatsApp. Most of the leaders are older....We started using Zoom when we were unable to meet face-to-face. I think less than half [of them participated]. I had to call them because to this day not all areas have [Internet] access. All of the work done by social organizations is voluntary, so paying for a connection is a big deal.

Our research found that local leaders' commitment to help others in their urban and rural communities was based on social ties and solidarity (Zembylas, 2010). They reported that it was mostly this kind of connection that fueled their need to adapt to these new challenging circumstances and, when possible, to learn new digital means of communication. Elderly participants with younger family members living close by were more confident than those without digital help when it came to using mobile phones and embracing new platforms like Zoom and Google Meet. As other scholars have pointed out, community actions are fueled by trust and empathy (Held, 2006; Williams, 2001). In this case, considering the needs of others during an uncertain and challenging time like the pandemic has paved the way for the adoption of technology, particularly smartphones. Antonia (68) was drawn to the idea of helping her neighbors but was very much isolated because she was not comfortable using a mobile device: "I don't really know how to use this," says Antonia, showing her smartphone, "my son bought it for me. I didn't find it very useful except for phone calls." This changed when she was invited to join the group "Friends With Food."

Access to these devices has been fundamental for both rural and urban populations. Many participants reported that most of them did not like being online and preferred face-to-face contact before the pandemic. However, when restrictions were introduced, particularly in urban settings, their desire to care for others in their communities led them to acquire, use, and teach others how to use digital devices. It is clear that their efforts to organize would not have been as effective without this technological assistance.

WhatsApp groups proved very useful to community members. City dwellers tended to use it to sell goods, help older people with their shopping, and share the newest information about restrictions, among other things. Given that most of the community's older residents have trouble using smartphones, some neighbors volunteered to contact them directly. They called them regularly to find out if they needed help with tasks such as buying groceries and applying for government subsidies online. Nearly two years later, most of the WhatsApp groups created because of the pandemic continue to operate, but their scope has expanded to include announcements about a neighbor's small business, church schedules, and local government meetings. The motivation for these group chats—besides maintaining communication with neighbors and disseminating

useful information—is clear from the ethics of care perspective, as the participants rely on their own sense of community and empathy (Gurmin, 2007).

Studies have also shown that people ask their families or peers how to use digital devices or go online (Courtois & Verdegem, 2016; Katz, 2010; Katz & Gonzalez, 2016). Laura (48), a rural homemaker who sells breakfast foods, fish, and pies, has two school-aged children and claims to have no digital abilities whatsoever: "I am more of a face-to-face person; I don't get the [smart]phone." At the time of the interview, she and her family had spent almost eight months in seclusion for fear of the coronavirus. She lives with Camilo (10) and Simón (12), who, like other children in the village, were forced to attend school online. Her house is located almost immediately behind another. It has no sewage service and a dirt floor. The main room contains a table with a red plastic tablecloth that brightens up the dark space. The two children share a single chair and computer in one corner:

They are supposed to go to school in the city. School lasted all day and included free meals. [Points to the computer] My eldest daughter got this from a governmental program.

Laura's eldest daughter, Renata, now lives in a different part of the country and has her own family and life. However, she sends WhatsApp audio messages to her mother to let her know that she needs to apply for financial help from the government digitally and how to use the computer to help her younger siblings: "Renata is the technology-savvy one. She knows how to use all this and how to apply for subsidies. She helped several other people who live here, too." She also uses the phone and WhatsApp audio messages to help her younger brothers, Camilo and Simón. Even with this help, the children fell behind, as the boys did not know what Zoom was or how to find links to connect to their classes without assistance. Furthermore, the screen would routinely freeze due to the poor quality of the signal.

Similarly, when Sebastián set up the WhatsApp group to coordinate care for the community, the group included older people who did not know how to use it: "The kids taught them....Their children, grandchildren, nieces, and nephews all started helping older adults with their cell phones."

Macarena (27) lives 1,200 kilometers away from this village in a farming town in the middle of the Atacama Desert. Like Laura, she is the mother of two school-aged children who live at home. Both reported a similar sense of despair and frustration due to continued fraught experiences with online classes. However, Macarena took the initiative and set up a satellite Internet connection to remedy her children's signal problems. She decided to share the costly service with her neighbors (about 15 families) when they needed it:

People asked me if they could use it to apply for financial assistance from the government. One family with small children needed it to do their online classes, and I immediately said yes. I gave them the password to get online.

Macarena acknowledges that having people outside her house using her Internet is comforting. Pulcini (2017) identifies this kind of assistance as “care out of love.” The emotion that motivates her actions involves caring for someone we are related to, such as her kids and community members. Her neighbors’ attitude is also interesting, as Held (2006) points out that the party on the receiving end must be perceived as having reliable intentions and as someone who would not try to take advantage of the help offered. To foster this kind of connection within the community, Macarena’s neighbors would ask her permission before using the Internet and would only use it for pressing reasons and not just to stream a movie. In the words of Purdue (2001), this is the crucial component.

Asking for and receiving help is not always an explicit act. As Gilligan et al. (1994) point out, indirect acts such as listening and helping others to connect to the Internet, particularly the most vulnerable members of a community, are also forms of assistance. Reported care is usually expressed as helping by teaching or doing something online for others in the digital arena, as seen in the case of the neighbors’ WhatsApp groups. However, facilitating Internet access can lead to other empathetic actions (e.g., Francis et al., 2018). For example, in one central Chilean city, we found an empty shop that still has the cybercafé sign outside. Its owner, Rodrigo (49), a former owner of one of the city’s first cybercafés, continues to run his office from there even though the desks that used to hold at least 20 desktop computers and three printers have been empty for almost five years. Rodrigo now sells antennas that double the power of Internet signals in geographically challenging places. His customers include the owner of a factory in the middle of nowhere and a school located between several hills. When he started his cybercafé venture, his focus was the same—to provide Internet access to those who needed it so that people could take advantage of technology:

I did not see it as a computer business at the time. I knew that people did not have access to computers...so I expected them to acquire digital skills so that our young people would be better prepared when it was time for them to go to university.

This kind of caring and connecting by providing digital opportunities was experienced at the community and extended family levels as well.

5. Discussion and Conclusion

Digital inclusion is a complex process with no linear path from Internet access to online skill development. The cir-

cumstances and needs related to these resources are highly dynamic and contextual, and other people are usually involved in the process. We use the ethics of care to analyze this phenomenon in an effort to enrich the academic discussion of the phenomenon. Specifically, we consider the role of emotions in influencing values and moral practices, which in turn may enhance digital development among members of a marginalized community. The questions guiding this article are: (a) How do digital technologies facilitate caring by connecting, organizing, and teaching others? (b) How do people provide-receive care through digital technologies in marginalized communities? We addressed them by combining the ethics of care with the digital inclusion framework in the analysis of 71 face-to-face interviews in 16 communities. We intentionally looked at vulnerable social groups in both urban and rural communities and how they have overcome challenges such as seclusion due to the pandemic, school closings, and economic hardships through empathy and caring. Given that technology can be identified as part of the solution—as it is a key element of responses such as teaching others, creating WhatsApp groups to organize help, or helping with signal access and strength—we consider the role played by emotions as triggers for seeking and providing care through digital means.

The participants’ accounts show that Internet access and experiences are highly contextual, as communities imprint some of their main characteristics onto their members’ social and technological interactions. These characteristics include living in remote areas, being part of a community that relies heavily on a single economic activity, and facing circumstances such as prolonged confinement due to the pandemic. These situations require individuals to navigate and address emergent digital issues, leading community members to offer and seek out assistance.

Our exploration of access to and use of technology in these communities consistently pointed towards emotions and caring practices. Therefore, we argue that the ethics of care framework allows us to explain some of the technological paths followed by community members. Moreover, it helps us to address the emotions associated with the situation and the instinct to help that characterized some of our subjects’ interactions and digital choices. For instance, we found that community members tended to experience feelings of powerlessness, frustration, and empathy. These emotions enhanced their empowerment and led them to seek out digital help, mainly through communication and organization. Thus, both elements were enabled by technologies regardless of challenges such as weak digital skills or low-quality Internet access.

Our findings point to a social situation that triggers an emotion which in turn leads to action—connecting, organizing, helping, or teaching. In the process, which is enabled by technologies, each member involved is strengthened by giving and receiving. For instance, due

to the pandemic, Internet access became essential for rural and urban communities; thus, the ethic of care among its members encouraged technology adoption and digital inclusion (e.g., Francis et al., 2018; Nemer, 2018). Digitally challenged communities provided fertile ground for helping and teaching others through a process that also renewed formal and informal leadership among its members. In some cases, participants offered help even before someone asked for it, which strengthened the communities' social ties (Sweeney & Rhinesmith, 2017).

The data show how various layers and approaches can be explored to disentangle the complexities of technological appropriation, in this case with a focus on emotions. For instance, empathy, compassion, powerlessness, and frustration were critical elements of enacting ethics of care among communities. Furthermore, some applications were adopted across the board despite digital and material inequalities, as is the case of WhatsApp. Their adoption level is related to the characteristics of the communities—i.e., the presence of younger generations. Our findings also support the argument that the role of organizing, helping, and teaching others how to use digital technologies is prevalent in tightly-knit marginalized communities with more trusting communication patterns. Finally, formal and informal leadership was renewed among community members through asking for help and assisting others, strengthening trusting relationships and decreasing the sense of powerlessness. Although these findings cannot be extrapolated to other marginalized communities, the results suggest that the intersection between digital inclusion and the ethics of care can shed new light on the Internet adoption process in vulnerable groups. The combination of approaches facilitated by focusing on more intangible elements such as emotions and caring about others brings the structural and emergent struggles faced by the communities due to changing dynamic contexts into the analysis.

The results also raise questions regarding the development of digital skills among community members. In our study, participants did not exhibit a high level of digital skills, but they had enough knowledge to help others. As a result, future studies should incorporate this aspect. Future research should also consider the exceptional digital needs that arose due to the pandemic and the disruption of participants' daily lives. It may be productive to conduct a study that covers a more extended period or incorporates a quantitative perspective, thus allowing researchers to analyze elements of the interaction such as how learning to trust in others influences individuals' inclination to seek help. A more comprehensive understanding of these dynamics can be achieved by employing a quantitative approach.

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Conflict of Interests

The authors declare no conflict of interest.

References

- Bagga-Gupta, S. (Ed.). (2018). *Marginalization processes across different settings: Going beyond the mainstream*. Cambridge Scholars Publishing.
- Bernard, H. (2006). *Research methods in anthropology: Qualitative and quantitative approaches* (4th ed.). AltaMira Press.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.
- Ciulla, J. B. (2009). Leadership and the ethics of care. *Journal of Business Ethics*, 88(1), 3–4. <https://doi.org/10.1007/s10551-009-0105-1>
- Correa, T., Pavez, I., & Contreras, J. (2019). The complexities of the role of children in the process of technology transmission among disadvantaged families: A mixed-methods approach. *International Journal of Communication*, 13, 1099–1119. <https://ijoc.org/index.php/ijoc/article/view/9153/2586>
- Courtois, C., & Verdegem, P. (2016). With a little help from my friends: An analysis of the role of social support in digital inequalities. *New Media & Society*, 18(8), 1508–1527. <https://doi.org/10.1177/1461444814562162>
- Crigger, N. J. (1997). The trouble with caring: A review of eight arguments against an ethic of care. *Journal of Professional Nursing: Official Journal of the American Association of Colleges of Nursing*, 13(4), 217–221. [https://doi.org/10.1016/s8755-7223\(97\)80091-9](https://doi.org/10.1016/s8755-7223(97)80091-9)
- Digital Regulation Platform. (2020). *Chile's telecommunications development fund: Monitoring and evaluation* <https://digitalregulation.org/chiles-telecommunications-development-fund-monitoring-and-evaluation>
- Donner, J. (2015). *After access: Inclusion, development, and a more mobile Internet*. MIT Press.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80–92. <https://doi.org/10.1177/160940690600500107>

- Francis, J., Kadylak, T., Makki, T. W., Rikard, R. V., & Cotten, S. R. (2018). Catalyst to connection: When technical difficulties lead to social support for older adults. *American Behavioral Scientist*, 62(9), 1167–1185. <https://doi.org/10.1177/0002764218773829>
- Galdames, M. (2021). *Estudio y recomendaciones sobre la resiliencia de la infraestructura del internet chileno* [Study and recommendations on the resilience of the Chilean internet infrastructure]. Universidad de Chile; Subsecretaría de Telecomunicaciones. <http://repositoriodigital.corfo.cl/xmlui/handle/11373/694936>
- Geertz, C. (1973). *The interpretations of cultures: Selected essays*. Basic Books.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Harvard University Press.
- Gilligan, C., Ward, J. V., & Taylor, J. M. (1994). *Mapping the moral domain: A contribution of women's thinking to psychological theory and education*. Harvard Graduate School of Education.
- Gurmin, J. H. (2007). Edith Stein and Tania Singer: A comparison of phenomenological and neurological approaches to the problem of empathy. *Maynooth Philosophical Papers*, 4, 99–122.
- Held, V. (2006). *The ethics of care: Personal, political, and global*. Oxford University Press.
- Helsper, E. (2021). *The digital disconnect: The social causes and consequences of digital inequalities*, SAGE.
- ITU. (2021). *Digital trends in the Americas region 2021: Information and communication technology trends and developments in the Americas region, 2017–2020*. https://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-DIG_TRENDS_AMS.01-2021-PDF-E.pdfork
- Katz, V. (2010). How children of immigrants use media to connect their families to the community. *Journal of Children and Media*, 4(3), 298–315. <https://doi.org/10.1080/17482798.2010.486136>
- Katz, V., & Gonzalez, C. (2016). Toward meaningful connectivity: Using multilevel communication research to reframe digital inequality. *Journal of Communication*, 66(2), 236–249. <https://doi.org/10.1111/jcom.12214>
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. SAGE.
- Mesch, G. S. (2012). Minority status and the use of computer-mediated communication: A test of the social diversification hypothesis. *Communication Research*, 39(3), 317–337. <https://doi.org/10.1177/0093650211398865>
- National Digital Inclusion Alliance. (2017). *Definitions*. <https://www.digitalinclusion.org/definitions>
- Nemer, D. (2018). Going beyond the “T” in “CTC”: Social practices as care in community technology centers. *Information*, 9(6), Article 135. <https://doi.org/10.3390/info9060135>
- NIC Chile, & Universidad de Chile. (2018). *Estudio y Recomendaciones sobre la resiliencia de la infraestructura de la Internet chilena. Informe técnico final* [Study and recommendations on the resilience of Chilean internet infrastructure. Final technical report]. Proyecto InnovaChile. https://www.nic.cl/estudios/resiliencia_uchile_corfo_subtel.pdf
- Paley, J. (2002). Virtues of autonomy: The Kantian ethics of care. *Nursing Philosophy*, 3(2), 133–143. <https://doi.org/10.1046/j.1466-769X.2002.00094.x>
- Pulcini, E. (2017). What emotions motivate care? *Emotion Review*, 9(1), 64–71. <https://doi.org/10.1177/1754073915615429>
- Purdue, D. (2001). Neighbourhood governance: Leadership, trust and social capital. *Urban Studies*, 38(12), 2211–2224. <https://doi.org/10.1080/00420980120087135>
- Rasse, A., Cáceres Quiero, G., Robles, M. S., Sabatini Downey, F., & Trebilcock Gac, M. P. (2021). Segregaciones: Habitar la periferia popular en Santiago, Concepción y Talca [Segregations: Inhabiting the popular periphery in Santiago, Concepción, and Talca]. *Bitácora Urbano Territorial*, 31(1), 223–235. <https://doi.org/10.15446/bitacora.v31n1.86855>
- Rosenblum, K. (1987). The in-depth interview: Between science and sociability. *Sociological Forum*, 2(2), 388–400. <https://doi.org/10.1007/BF01124171>
- Slote, M. (2007). *The ethics of care and empathy*. Routledge; Taylor & Francis Group.
- Stein, E. (1989). *On the problem of empathy*. ICS Publication. (Original work published 1917)
- Straubhaar, J. (Ed.). (2012). *Inequity in the technopolis: Race, class, gender, and the digital divide in Austin*. University of Texas Press.
- SUBTEL. (2021). *Especial análisis tráfico internet Marzo 2020—Junio 2021* [Special analysis of internet traffic March 2020–June 2021]. https://www.subtel.gob.cl/wp-content/uploads/2021/09/PPT_Series_JUNIO_2021_VO.pdf
- Sweeney, M. E., & Rhinesmith, C. (2017). Creating caring institutions for community informatics. *Information, Communication & Society*, 20(10), 1482–1497. <https://doi.org/10.1080/1369118X.2016.1234635>
- Tong, R. (1998). The ethics of care: A feminist virtue ethics of care for healthcare practitioners. *Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine*, 23(2), 131–152. <http://doi.org/10.1076/jmep.23.2.131.8921>
- UNDP. (2017). *Desiguales: Orígenes, cambios y desafíos de la brecha social en Chile* [Inequalities: Origins, changes, and challenges of the social gap in Chile]. <https://www.undp.org/es/chile/publicaciones/desiguales-origenes-cambios-y-desafios-de-la-brecha-social-en-chile>
- van Dijk, J. (2012). The evolution of the digital divide—The digital divide turns to inequality of skills and usage. In J. Bus, M. Crompton, M. Hildebrandt, & G. Metakides (Eds.), *Digital enlightenment yearbook 2012* (pp. 57–75). IOS Press.

Wellman, B., & Berkowitz, S. D. (Eds.). (1988). *Social structures: A network approach*. Cambridge University Press.

Williams, F. (2001). In and beyond new labour: towards a new political ethics of care. *Critical Social Policy*, 21(4), 467–493. <https://doi.org/10.1177/026101830>

[102100405](https://doi.org/10.1080/17449642.2010.516636)

Zembylas, M. (2010). The ethic of care in globalized societies: Implications for citizenship education. *Ethics and Education*, 5(3), 233–245. <http://doi.org/10.1080/17449642.2010.516636>

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