11 The Impact of Public Access to Telecenters: Social Appropriation of ICT by Chilean Women

Alejandra Phillippi and Patricia Peña

Abstract

This chapter reports the findings of a study in Chile that examined the impact on women of public access to computers and the Internet through the *Quiero Mi Barrio* telecenter network. Gender and culture variables are taken into consideration because these define forms of practical as well as symbolic meaning of a public community space such as the telecenter and of the Internet as a means of communication and information. The study highlights the importance of telecenters, given the limitations that cybercafés (the most common public access option) present to women. The analysis forms the basis for the following recommendations: the State should strengthen telecenters as spaces that attend to the needs and demands of women, encourage greater participation of women in the access to and beneficial use of technology, and foster the development of new models to develop women's digital skills and help them realize their aspirations and meet their everyday needs.

Introduction

What do poor urban Chilean women do in the telecenters set up under Chile's *Quiero Mi Barrio* ("I Love My Neighborhood") program? Are there differences in how women and men learn and use the information and communication technologies (ICTs) that can be accessed in these venues? What benefits are perceived by Chilean women who use computers and Internet in these centers?

This study presents part of the analysis and conclusions from an investigation conducted in Chile on the social impact associated with the implementation of the *Quiero Mi Barrio* (QMB) Telecenter Network (*Red de Telecentros Quiero Mi Barrio* [RQMB]) on a group of users and women nonusers living in conditions of socioeconomic vulnerability. The study focused on two telecenters: one located in a community (district) of the Chilean capital of Santiago (Metropolitan Region), and the other in San Fernando

(O'Higgins Region), a provincial city in a predominantly agricultural area 140 kilometers south of the capital.

The QMB program was implemented by the Ministry of Housing and Urban Development (*Ministerio de la Vivienda y Urbanismo* [MINVU]) between 2006 and 2009, during Michelle Bachelet's first Presidential administration (2006–2010). Its purpose was to improve the infrastructure and quality of life in more than 200 vulnerable neighborhoods in Chile through a variety of social interventions. The addition of telecenters to the program was funded by the Sub-secretariat of Telecommunications (SUBTEL) in one of the final stages of the project. Launched in late 2009 and continuing into 2010 under the administration of President Sebastián Piñera, this particular implementation faced delays in its development and operational phases (some due to an earthquake on February 27, 2010). About 150 of these telecenters were installed in the neighborhoods targeted by the program.

The QMB program aims to work with vulnerable sectors of the population. Chilean women involved in this study live in working-class neighborhoods far from the civic and commercial centers of the city. In both the Metropolitan Region and the O'Higgins Region, these areas are characterized by medium-low and low socioeconomic levels, and their residents generally have minimum-wage incomes, basic levels of education, and precarious working conditions. Overcrowding is common and particularly evident in the cramped, poorly soundproofed apartment blocks posited as government-subsidized housing solutions, where resident families often lack privacy and peace. According to the testimonies of the women and men we interviewed in both neighborhoods, drug abuse, alcoholism, and delinquency are the main difficulties faced by people living in these settlements. Some of the residents have moved there from sectors of the city that have been eradicated, where social relationships were fraught with distrust and public spaces were thought of as dangerous places where bad habits are learned.

The Quiero Mi Barrio Telecenters

The objective of the telecenters belonging to the *Quiero Mi Barrio* Telecenter Network is "to achieve the social appropriation of ICT by people who live in the neighborhoods through 'meaningful use' of the available technology," where an objective of the strategic guidelines is "to watch for and observe why the telecenters installed in the country become part of the particular dynamics of the social, economic, and cultural order particular to each neighborhood" (Centro de Investigaciones de la Inclusión Digital and Sociedad del Conocimiento 2009, p. 4).

The centers are managed by the Neighborhood Development Councils, local volunteer administrative groups, with the support of a team of professionals from various

universities who are responsible for area coordination of the network. The Research Center for Digital Inclusion and the Knowledge Society (Centro de Investigaciones de la Inclusión Digital and Sociedad del Conocimiento [CIISOC]) at *Universidad de la Frontera* (www.ufro.cl) has been charged with coordinating the project's execution in the southern part of the country; in the central regions, the responsible agencies are Universidad Central and the *Asociación de Telecentros Activos de Chile* (ATACH); and in the north, it is Universidad Arturo Prat. These coordinating entities are responsible for hiring the telecenter operators and making sure they take care of managing day-to-day operations and providing the services offered at the centers (using computers equipped with free software-based Ubuntu operating systems). The telecenters' strategy for economic sustainability has yet to be defined. In general, they do not charge for Internet access or computer training, but some request a volunteer cash contribution or charge below-market prices for their services.

The first of the two telecenters studied is located in the Villa San Francisco de Asís, a neighborhood in the Metropolitan Region of Santiago, Chile; the second is located in Villa San Hernán, in the City of San Fernando in the O'Higgins Region. Both neighborhoods are small (1,400 and 3,600 residents, respectively) and relatively young (San Francisco was built in 1980 and San Hernán in 1991). Developed as state-subsidized social housing projects, they consist of polygons of apartment blocks. The apartment units were assigned to families relocating from eradicated shantytowns in other communities and families who applied for housing subsidies in order to move out of relatives' homes where they lived as displaced "arrivals." In addition, San Hernán is located in a predominantly agricultural region that has lower development indicators than those in the capital.

These telecenters were selected for study because they had been in operation for a similar period of time. The following tables show some basic features of the two centers (table 11.1) and their users (table 11.2).

Gender, Cultural Appropriation, and Digital Literacy

Our study considers the gender perspective and its relation to ICT as a continuous dynamically evolving process that is constantly being redefined (Rodríguez Contreras 2011). It takes into account the contributions of communications, education, and cultural studies, that make us ask *what uses and appropriations* people make of various media and their contents, and requires us to consider the symbolic dimension of the process and the meaning and reassignments of meaning that people impose on their media consumption (Sunkel 2002, citing García Canclini 1999). In our case, technology and the telecenters are media and spaces that are incorporated into the lives of women and men in different ways.

Table 11.1General Aspects of Telecenter Operations and Services

	San Francisco Telecenter	San Hernán Telecenter		
Opened	January 2010	February 2010		
Computers	9, all with Internet connection	8, 6 with Internet connection		
Opening hours	Monday to Friday: 9 A.M. to 8 P.M. (without closing for lunch)	Monday to Friday: 10 A.M. to 12 P.M. and 2 to 8 P.M.		
	Saturday: open for workshops and training only	Saturday: 3 to 8 P.M. (for workshops and training only)		
Users per week	200 (35 to 40 daily)	150 (30 daily)		
Connectivity	Exclusive fiber optic (quality and spee	d of connection variable)		
Financing	QMB Program Resources—MINVU and	d SUBTEL (until 2012)		
Role of those in charge	Telecenter administration and management Opening and closing of the telecenter Cleaning and maintenance Supervision of operations and use of computers and Internet User support for those who request or require help Teaching of courses and training workshops			
Services	Free access to computers with Internet (with a box for volunteer contributions) Printing and photocopying (paid) Computer and Internet courses (free)	Access to computers with Internet: 300 Chilean pesos (approx. US\$0.60) per hour		
Rules of use	Basic rules of respect and sharing among users (particularly childr Pornography sites are blocked.			
	30-minute time limit on use, particularly at times of high demand. When children are doing homework, their access ends when they complete it	No time limit on use		
Diffusion	Organization and operator member networks; word of mouth among neighborhood residents; signs on bulletin boards	Sign outside the telecenter; through organization and operator networks; word of mouth among neighborhood residents		
Other activities	Telecenter operates in a community center where fundraising activities (for the improvement of the telecenter and community center) and community activities take place; for example, there is an oven to make bread to sell, and the facility is rented out for parties and bingos	Various fundraising activities		

Table 11.2 Motivations, Assessments, and Gender of Telecenter Users

	San Francisco Telecenter	San Hernán Telecenter	
User profiles	Mainly children (boys and girls) who go to do their homework. Also, young people and adults of both sexes. More adult women than adult men.	Mainly children (boys and girls) who go to do their homework. More adult women than adult men.	
Motivation	For children and youth, the telecenter is a place to do homework and find entertainment. Adults frequent the telecenter mainly to check their email and use Facebook. They value the fact that the service is free. It is a peaceful place.	For children and youth, the telecenter is a place to do homework and find entertainment. Many parents leave their children at the telecenter because it is a safe place; they use it as a "babysitter." Adults frequent the telecenter mainly to check their email and use Facebook. They value the facts that it is affordable and close to their home or workplace.	
Training	Free training is offered using the INTEL-Learn model, which covers basic user literacy for text software applications and Internet and email account use. Participants are evaluated based on development of a project that uses technology to meet a given user need.	Free training is offered in basic user literacy for text software applications, presentations, and Internet and email account use. A citizen journalism workshop was held for adults to create a news blog for the neighborhood.	
Work	Work is associated with access to the telecenter and use of the Internet only in exceptional cases of unemployed people who come to send their résumé or to research job opportunities on line.		
Sociability	For some adults, the telecenter is a place where they can socialize and meet their neighbors.	A more impersonal environment is observed at this telecenter than at the one in San Francisco, and there is less exchange and interaction among users.	
Gender	In contrast, more adult women that The majority of the women go to confor their children's homework. Men go to the telecenter at the end	there are no great gender differences. In adult men tend to use the telecenters. In adult men tend to use the telecenters.	

The gender perspective of the study considers that this "determines what it can expect, what is allowed and valued in a woman or a man in a given context" (United Nations Development Programme 2010). Also, the concept of appropriation used here is based on "learning by doing" and "learning by using," and it recognizes that people appropriate technology through different stages, including, for example, adoption, implementation, and reconfiguration (Bar, Pisani, and Weber 2007).

This chapter begins with a description of the methodology used; it then presents findings about the impacts, both positive and negative, of public access on male and female users and nonusers. We next focus on women, showing the impact that telecenters have on their lives and outlining women's role in better understanding the impact of their use of public access. We conclude with a discussion of public policy issues.

Methodology: Building the Categories from Daily Neighborhood Life

Understanding the ways that daily life changes or does not change as the women studied gain access to ICT through a telecenter requires an understanding of this group's sociocultural context and the variables that help determine the way these women appropriate the venue as well as access and use the Internet.

The study integrates quantitative and qualitative techniques using grounded theory methods; that is, constructing a theory inductively from data that are codified, comparatively analyzed, and relationally contextualized (Glaser and Strauss 1967; Strauss 1987; Strauss and Corbin 1998). Studies using this perspective emphasize looking for relevant information in various situations where what is being studied manifests itself, with constant examination for similarities and differences in the analysis of each sampled unit that is considered important to the research objective. Thus, everything done is based on the concepts that emerge as the study develops.

We worked from information and data gathered in both physical and social spaces to obtain information that would help identify the processes and situations produced by the implementation of telecenters in both neighborhoods. In a complementary manner, the gender perspective adopted in the study involved focusing on women users and nonusers of the public access centers; men were included for comparison.

We surveyed 295 men and women ages 18 and older from the two neighborhoods, regardless of whether they were users of the telecenter and whether they used computers and the Internet at other sites outside the telecenter (See table 11.A.1 in appendix 11.A). The survey was administered by two research assistants through in-person, face-to-face interviews on weekdays and weekends, in respondents' homes or at the telecenter or local community center. Participation was voluntary. The questions covered

sociodemographic dimensions such as interviewee profiles, access to and use of the Internet in general, concepts and assessments associated with the Internet, access to and use of the telecenter, and assessments of the telecenter.

Once the initial results had been reviewed, profiles of the users and nonusers of the telecenters were constructed. Likewise, these initial data were used to create the first set of telecenter user profile categories according to two major criteria: frequency of visits to the telecenter and Internet use skill level. These criteria were used to classify the users into four categories:

Full-advanced: Uses the telecenter daily, is digitally literate, uses software, and knows how to search and use the Internet without help.

Full-novel: Uses the telecenter daily, is at an early stage of the digital literacy process, uses software, and searches and uses the Internet with help.

Sporadic-advanced: Uses the telecenter infrequently, is competent in software use, and knows how to search and use the Internet without help.

Sporadic-novel: Uses the telecenter infrequently and is beginning to use software and the Internet in general.

Interviews were then conducted based on these classifications until *theoretical satu- ration* was reached. At this point the investigator stops sampling the different groups in each category because the possible contribution of information is exhausted (Trinidad, Carrero Planes, and Soriano Miras 2006).

In parallel with the survey, the operators of the telecenters, directors of the Neighborhood Development Councils, and SUBTEL and MINVU consultants were also interviewed. They were asked about the implementation of the telecenters, their evaluation of the process in the short time that the program had been in operation, their perception and analysis of the impacts of the telecenters in the neighborhoods, and their perceptions of and opinions about the existence of a gender perspective in this process.

Survey respondents were invited to participate in five group conversation sessions with women and men from the two neighborhoods (table 11.A.2 in appendix 11.A) in order to contrast the results and better identify the profiles of the people who should be subsequently interviewed in depth. In the focus groups held at the San Francisco telecenter, fourteen women users, six women nonusers, and five men users participated. In the focus group held at the San Hernán telecenter, five women nonusers participated. These focus groups were held on weekdays and weekends, preferably in the afternoon, at community centers previously prepared by the organizations in charge. On average, each session had five to eight participants and lasted about fifty minutes. Topics discussed included the participants' neighborhood environment, daily

routines, social practices, communication routines and practices, patterns of computer and Internet use (in general), and perceptions and assessments of the installation of the telecenter and Internet use in general.

As a final step, twenty-one people were interviewed in depth (table 11.A.3 in appendix 11.A). These conversations took place in the respondents' homes or at the telecenter and lasted about an hour and fifteen minutes. The topics of conversation were similar to those of the focus groups but more in depth through individual face to face exchanges.

Our findings are presented in the following sections.

The Impact of Two Telecenters in the Lives of Chilean Women

For a good portion of the residents of the neighborhoods served by RQMB, having a public access center for ICTs implies an opportunity to "get close" to something that until now has been beyond their reach mainly because of their socioeconomic conditions but also because of their lack of familiarity with the potential benefits of technology. By narrowing the gap between these women and digital technology, public Internet access makes what was "outside of my life" part of their daily routine.

It also implies that those who use these public access centers have access to technology that is otherwise beyond their reach (e.g., if they cannot afford to buy a computer or subscribe to Internet service). The telecenter constitutes one more form of access and one that adds value to the channels of media consumption they already use.

Impact Assessments from Users

Regardless of whether they are users, people have a certain familiarity with the Internet and generally perceive it as a "door opener." However, although the Internet is accessible to them in theory, taking advantage of it requires the development of certain abilities, as well as a space that is within the user's reach and forms part of their daily life.

Figure 11.1 summarizes the main assessments reported by survey respondents and how they perceived public access, the possibility of connectivity, and the impact of the telecenter. The figure reflects the convergences emerging in the interviews at both the San Francisco and San Hernán telecenters. No major differences are found in the assessments made. Emphasis is placed on the agreed-on information, which has been considered representative of tendencies.

The assessments have been articulated in two dimensions. The first is *positive impact* or *negative impact*, according to the respondent's perception of having a public Internet access center in their neighborhood. The second dimension depicts two large groups of

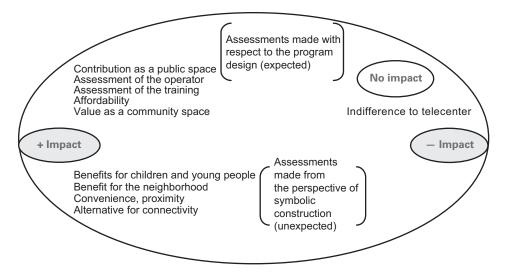


Figure 11.1 Assessments arising from analysis of the interviewees.

assessments: those that are *expected* because they are part of the design and conception of the program, and those that are *unexpected* and are observed as symbolic perceptions constructed by users and nonusers, both women and men.

Positive Impact: Expected Assessments What is the perception of the contribution made by having a public access space in the neighborhood? The general consensus among the twenty-one interviewees was that the telecenter is a positive addition to their neighborhoods and fifteen interviewees specifically associated this assessment with concrete benefits. Some commented that it should be considered a right to which they are entitled. Interviewees' appreciation is illustrated by the following statements (I = interviewer, R = respondent):

I: What effect has the telecenter had on the community?

R: There is more information for the people. (Woman user #5, full-novel user of the San Francisco telecenter)

R: Yes, first I thought that it was going to be for the school but later they explained that no, it was for everyone from the neighborhood.

I: What value does it have?

R: [It has] great value because people have a place to go to do their things, so that women stop doing other things and they can go and get connected. (Woman nonuser #2, San Hernán telecenter)

R: I think it's great that all people, that all kinds of people have the ability to go, get involved and learn, because one never has a limit to learning, there is always the right to learn and it's a benefit because it's free. (Man user #1, sporadic-novel user of the San Francisco telecenter)

Although it was not a requirement for selection, both telecenters studied are operated by women. Their duties include helping people use the computers so that novel users are able to overcome the "shame barrier," and acting as mediating agents in these processes as users require and request assistance. The appreciation for the center operator can be seen in the following comments by one of the interviewees:

I: How do you think community life has changed with the presence of the telecenter?

R: Yes, indeed it has changed a lot because not everyone has access to Internet here and people do not always have money to pay for the Internet. When they ask you for a fee in some venues, not everyone has the money or the resources.

I: Is that important?

R: Yes, because you can learn there. If you do not have a computer and you're embarrassed, you can learn there. There was once a lady who was learning and Karen [the operator] told her to do this or that...and I came here to learn....(Woman user #2, sporadic-novel user of the San Francisco telecenter)

At least nine of the people interviewed expressed their appreciation for the digital literacy training offered by the telecenter, as indicated by the following comment:

R: Alone, yes, I chatted there. I learned how to use e-mail in the second course, to attach a file. I use the social networks and my e-mail every day. If I don't go to the telecenter I go to the Internet café or use my cell phone. (Woman user #10, sporadic-novel user of the San Hernán telecenter)

Free or low-cost access to computers connected to the Internet is considered an important contribution. The following statements reflect the sentiments of eight indepth interviewees:

I: If the telecenter didn't exist, what would happen?

R: We'd have to go somewhere else...to a normal Internet café...and we'd have to spend more money, and that's something important here because an hour of surfing the Internet is much cheaper [here] than at an Internet café. (Man user #5, full-novel user of the San Hernán telecenter)

R: Well, the thing is that the benefit now is that the moms don't go downtown. Previously, I had to give my kid 500 pesos for the fare; now he does the work here, and with the 500 pesos I used to give him to go and come back, I have money left for a snack. The thing is that money is important in this neighborhood—I've seen it with the people, and that's the answer. I see how my son is here, and the youngest, I leave him here and later I come pick him up. (Woman nonuser #3, San Hernán telecenter)

In the focus groups of women users, there were manifestations of positive assessment of the telecenter as a community space where they run into neighbors and relatives. This aspect, however, was not mentioned by any of the people interviewed individually.

Positive Impact: Unexpected Assessments The unexpected assessment mentioned by the majority of the interviewees (sixteen of twenty-one) is that the most direct beneficiaries of the telecenter are the neighborhood children and youth.

I: How do you think the telecenter has changed the neighborhood?

R: For me, this has changed it in many ways because the children are learning more every day and it is good for them, they are more motivated, they behave better, and they can come in whenever they want....(Woman user #4, sporadic-novel user of the San Francisco telecenter)

I: How did you feel when you saw the telecenter open with computers?

R: I felt like I was part owner—it's like something arrived at my house. I don't know if it will be a little complicated to explain it: it's that it's happiness, happiness because the children were going to have a way to do their homework. When my son was in grade school he had to go to the other side of the city to do his computer class homework, and he got home at two in the morning with me waiting at the door, because it was less dangerous back then....(Woman user #11, sporadic-novel user of the San Hernán telecenter)

R: Now the children are part of an environment that didn't exist before. It gives them free access, and they have more opportunities to do their homework. (Man user #3, sporadic-advanced user of the San Francisco telecenter)

R: [It's] very important.

I: For whom?

R: For the neighborhood, for self-esteem, for the voice of the neighborhood, and, the most interesting, for the children because they are born next to their computer, and they took good advantage of the opening period because they didn't have to pay at all....(Man user #4, full-novel user of the San Hernán telecenter)

Another perceived benefit is the recognition of the telecenter as a positive venue for everyone in the *villa* and a feeling of pride in being associated with the processes and changes to improve the appearance of the neighborhood. This was stated in one form or another by fourteen of the people interviewed in depth. The telecenter is seen as an initiative and a place that makes their *villa* stand out from others and adds to their quality of life.

R: Access to the Internet. I think the Quiero Mi Barrio program, more than the playgrounds and other changes, the best idea was installing a telecenter because the people can aspire to new levels. For example, if I have to do a "pre-u"² and I don't have any money, I can do it on the Internet. (Woman user #6, full-advanced user of the San Francisco telecenter)

I: Is it important that it continues to operate?

R: It's vital because point number one, it generates resources for the neighborhood, and two, it's a place to access culture because not every neighborhood has a telecenter.... (Woman user #10, sporadic-novel user of the San Hernán telecenter)

The telecenter is a PAV that does not involve spending money and in many cases is perceived as more comfortable and closer which means not wasting time going there. In addition, its facilities and equipment are apparently better than those at cybercafés or even of home Internet and computer setups, as mentioned by five people interviewed, including these two:

R: The thing is that I would like to take one of these [computers] home, because I have one at home with [Internet] connection and these seem easier to me than the one in my house because of the difference broadband makes. The one here is an LCD—I don't know, maybe that's the difference, and the keyboard

is more comfortable. I like the ones here better. (Woman user #3, sporadic-novel user of the San Francisco telecenter)

I: Did your life change with the telecenter?

R: Yes, a lot. Before, I had to be looking around in other places because around here, in this area, there aren't any Internet cafés; the closest one is two neighborhoods away. I know that here I can come and be back one hour later; and so before, there were things I couldn't do, and I had to wait an hour or two to use a computer. (Man user #2, full-advanced user of the San Francisco telecenter)

The telecenter also provides an alternative to home connection (when available) and is generally used when there is no other way to access the Internet or when residential service is not available. Many respondents mentioned the telecenter as an alternative to paying a monthly fee to share some of their neighbors' Wi-Fi signal, an arrangement that, although illegal, is accepted in the community.

Three of the four users interviewed had a shared Internet connection at home. One commented:

R: Here there is a young man who provides Internet via Wi-Fi.

I: Is the connection constant or does it get interrupted sometimes?

R: It's paid Internet, and we pay for access. He has Telefónica, and he has the antenna put up and he shares it.

I: And when you don't have a connection?

R: I go to the telecenter. (Woman user #2, sporadic-novel user of the San Francisco telecenter)

Negative Impact or No Impact Four of the respondents—one man and one woman user, and one man and one woman nonuser—are indifferent to the telecenter. They do not perceive the space as contributing to their lives or bringing significant change to the neighborhood context, and they do not consider it a space that they can access. This can be understood as non-fulfillment of the program goal and is expressed in the following testimonials:

R: Aside from being bad?

I: Why do you say "bad"?

R: Bad, boring because there's nothing there; now that there's the telecenter, there are no pretty things that they do for the mothers. They [the young people] just lie there, partying until dawn. (Woman user #1, sporadic-advanced user of the San Francisco telecenter)

R: Of course I was left out, we were left out, yes, I am left out of the telecenter, also because imagine at night, everything is closed and you can't go in the gate....(Man nonuser #1, San Francisco telecenter)

Access Differences by Gender

In addition to the positive assessment of the telecenter by both women and men, the results of the questionnaire reveal impacts differentiated by gender. The percentage of women users who connected to the Internet for the first time at the telecenter is 14

percent, versus 2 percent of men. The number of men who connect in other places is also greater, making the telecenter an additional option for connection for them. When asked about points of connection aside from the telecenter, 83 percent of the men but only 63 percent of the women said they knew of and had visited other venues.

Some of the women interviewed at the San Hernán telecenter mentioned having been to an Internet café at least once, usually to help with their children's homework, but this was not a regular occurrence. Two of them commented that such places are not welcoming and that they generate "suspicion" and impersonal treatment.

I: Have you been to an Internet café?

R: Yes, I have seen them. Once I went to one that is over there to do a homework assignment because this one was closed, but that was the only time.

I: Is it different from the telecenter?

R: The thing is,...here, it's more close to me or maybe it's closer to where I live, I think....I don't know about the difference; the thing is that they helped me the same, and the information, and one starts to trust the person who works here more.... (Woman user #9, sporadic-novel user of the San Hernán telecenter)

R: It's that the telecenter is a study center and not a place to hide and download whatever you want. There is a big difference between an Internet café and a telecenter; they're not the same. (Woman user #10, sporadic-novel user of the San Hernán telecenter)

I: Do you go to cybercafés?

R: No, because they are dirty, dark, and cold, and the children make noise, and it is impossible to concentrate. (Woman user #8, full-advanced user of the San Hernán telecenter)

Women as Agents of Access "For Other People's Sake"

Observations made by the interviewees shed light on two important processes: first, the construction of gender as a *collective ideology* that gives weight to what "others expect or think of me," and second, a *self-construction* where each subject establishes his or her own personal attitude. These constructions are always linked to the role, or "imaginary," of what it is to be a woman or a man.

Even if both men and women make constructions, only women reported limiting their feelings when a man is placed in a position of power with respect to the woman, whether his relationship to her is partner or father. At least seven of the thirteen women interviewed mentioned this in their accounts, as expressed in the following interview excerpts:

R: Yes, I think that yes, women limit themselves more, they are more limited by the "what will they say." If you visited a certain page and your husband saw you and you closed the page, it could be because you have that mentality or a macho husband. (Woman user #5, full-novel user of the San Francisco telecenter)

R: My studies, yes, but it wasn't normal after I had my son because my other partner was very dominating and didn't let me finish, and that made me have a lot of problems because he wanted to do everything....

The thing is that from a very young age I never had dreams...I had a very strict father who never said any good things about me, and, I don't know, I never...He always decided for me and never said anything to me. He cut my hair shorter like his, like a military cut; he liked to cut hair so he cut mine. (Woman user #2, sporadic-novel user of the San Francisco telecenter)

One of the open questions on the questionnaire was about people's goals and dreams and, specifically, how the Internet contributed to their achievement. The goals and dreams of the women interviewed were related to the well-being of the people close to them. Forty-four percent indicated that when asked about future goals or dreams they hope to achieve, the first thing they think of is "my children's studies" or "that my children have a better life." In contrast, only 23 percent of the men mentioned something similar as a first response, indicating that women are more concerned than men with the interests and welfare of others.

When describing their daily lives, including the feelings and the spaces they inhabit, thirteen of the women interviewed (two of whom work) made it clear that both dimensions are measured and truncated mainly by their domestic duties, which start with getting up in the morning and moving family life along with breakfast, continue with taking their children to school or kindergarten, and then dedicating themselves to cleaning activities and making lunch. Only once these activities are completed do they have free time to take a nap in order to get back to their chores and start others when the children come home. There are few distinctions made with respect to "weekend time," which according to media messages should be different from or involve fewer routine activities than the rest of the week. Only one of the women interviewed diverged from this pattern, and she lives alone.

In contrast, the men talk about timing in terms of their work schedules, which sometimes include long hours and weekend shifts. Only one of them reported less rigorous daily activity: the youngest man interviewed, he lives with his mother and works only sporadically.

For most in-depth interviewees (sixteen of twenty-one), both men and women, time off is scarce. Sunday is family time, but there is no equivalent during the rest of the week, and for three of the people interviewed, Sunday is just another working day. Also, part of the day on Sunday is dedicated to domestic work, cleaning, cooking, and "getting ready for the week." Only the woman living alone, who has a widow's pension, mentioned having leisure time.

Women's perception of the world is closely linked to their perception of the physical conditions of their neighborhood. Their perception of the city they live in, in contrast, is remote and has little prominence. Their symbolic view of the environment is

confined to the boundaries of their homes. Of the seven interviewees linked to the San Francisco telecenter, only two mentioned participating in activities outside the neighborhood. In contrast, the women of San Hernán are more familiar with the spaces and services offered by the city in which they live. Even if both neighborhoods are parts of peripheral sectors of the city and the women's routines are confined to the physical space in which they live, it would seem that the distance between the neighborhood and the city center has a bearing on some of those routines. In the case of the Metropolitan Region, the marginalization of the neighborhood is aggravated by the size of the city and the limited resources and transportation options the women have to move about the city.

The men interviewed, particularly at the San Francisco telecenter, tended to be more connected to the Internet than the women in venues other than the telecenter. In general, they travel greater distances and move more freely throughout the city, for work or other reasons, which often allows them to find other options for Internet access and connectivity. It also implies that the men move within a physical space greater than the perimeter defined by their homes and that they inhabit less restricted spaces than the women do.

In the end, because they determine both the times at which users can access the Internet and how far they can go in their use of this resource, the dimensions of time and space influence men and women differently. Even when men and women are at the same physical distance from the access point, the telecenter has a greater positive impact on women because it puts something previously inaccessible within their reach.

Between "Literate Full-Advanced Users" and "Digital Illiterates"³

The following typology of women users serves as an aid in understanding the causes and contexts that condition women's perceptions of proximity to or distance from the telecenter and the Internet. Three stages can be detected in the perceptions of women interviewees:

- 1. Digitally literate, full-advanced users who consider themselves close to the telecenter and the Internet;
- 2. Full-novel users who are taking their first steps toward digital literacy; and
- 3. Nonusers who do not have the skills to use technology and whom we therefore call digitally illiterate. Their conceptions keep them distanced from the telecenter and digital technology.

Sporadic-advanced users and sporadic-novel users were not considered here because these women are outside the scope of the study—the former group because, being only

occasional users of the telecenter, their processes of approaching technology are not related to the telecenter, and the latter group because these women, even if they have manifested an intention to learn computers or the Internet, have not consolidated the process in any verifiable way and are therefore grouped together with nonusers.

Digitally Literate Full-Advanced Users of the Telecenter Of the ten women users interviewed in depth, five fall into this category.

Two women (one from each telecenter) are intensive users of the telecenter and fairly advanced Internet users. They are more technologically experienced than the rest of the women and report having undergone digital literacy training processes prior to their arrival at the telecenter, which is why the telecenter's impact on them cannot be considered direct. They constitute a reference point for what may eventually be achieved by less experienced users.

For the other three women in this category, the Internet has an important place in their lives and routines, thanks to the connection they access at either the telecenter or another venue. They were offered the opportunity to become familiar with technology by someone close to them who introduced them to the Internet or provided them with access from their homes; in one case, the woman decided to buy a computer so that her children could do their homework at home. Even so, connectivity is frequently unstable. One of the women has an "illegal" Wi-Fi signal that a neighbor shares with (sells to) her, another does not always pay for service, and the third connects at a relative's house. In these cases, the telecenter provides an alternative that allows them to realize their high motivation to be connected.

Within their practices and patterns of Internet use, these three women describe purposes that have to do with online communication and sociability (social networking with friends, relatives, and acquaintances, particularly via Facebook, chat, and Messenger). To a lesser degree, they also start to develop website search routines of specific or favorite sites according to their motivations and preferences—for example, leisure, surfing the Web, or listening to music. This is reflected in the following quote from one of the women:

R: It's very relevant because the Internet changed my life and allowed me to contact my relatives who live outside of the country; together we use Facebook, Messenger, and Skype, and we also use the cameras. At home, I haven't been able to include my family as much because most of them work and aren't home during the day.

In my case, I am on the Internet for social reasons, both individual and family-related. With respect to the individual, I relate it with my own learning of many things. For example, I have bad handwriting, but the Internet has helped me to improve it by looking at methods to improve it. (Woman user #6, full-advanced user of the San Francisco telecenter)

The value of communication through the telecenter is vital for these women, and they even start to perceive more strategic or complex processes of appropriation, such as strengthening or innovating for their small business ventures (a mini-market, selling clothes, selling cosmetics). For one of the women users who manages a small neighborhood store, this process of appropriation of the various services and resources offered on the Web is evident. This does not mean that she has reached a higher level or greater depth with this type of use (e.g., filling out online applications for products or making payments and doing her banking online) because she still does not visualize this as an opportunity to do these particular things:

I: How relevant is the Internet in your daily life?

R: I think it's good for comparing product prices, for example, for my business. That's it, more than anything else, because your friends you just call once in a while, when you have time to connect. But that's it, really. Once in a while I look for addresses or telephone numbers to go somewhere, maybe find the closest bank....And for my daughter's homework....(Woman user #7, full-advanced user of the San Francisco telecenter)

The women who talk about their digital literacy processes have been guided or instructed by someone close to them, like a family member or friend, which tends to condition the *type of use* they make of the Internet (e.g., Google, Facebook, chat, or Messenger), *how they use it* (e.g., to contact former high school classmates or friends and relatives who live far away, or to accept and incorporate new contacts), and *what they use it for* (e.g., to download music, search for information, navigate popular websites). This fairly spontaneous process often goes unfinished, frequently continuing in an independent way through self-teaching by trial and error. One woman mentioned the support she received and what she learned thanks to the operator and a workshop held at the telecenter:

R: It's the possibility that I have to communicate with them. I have Facebook, I have Twitter, but I don't use it much because I find it very impersonal—it's like Messenger, unlike Facebook, where you can find out what's going on because you can see pictures and videos; and my Hotmail that I am always using and it's interesting because there are people who contact me in Santiago that I stopped seeing two years ago and there continues to be a respectful relationship there. (Woman user #8, full-advanced user of the San Hernán telecenter)

These five full-advanced users share their situations and the personal processes that have let them break out of their routines in the home and their exclusive role as mothers. Whether because they work outside the home, decided to open a small business, or made changes in their lives in response to a specific personal situation, they are now experiencing learning processes. These may include searching for other opportunities and challenges at a personal or family level, whether spontaneously or because they are

"forced to"; however, all have as their objective helping their family get ahead and providing their children with better opportunities. They are very motivated women.

Full-Novel Users of the Telecenter: First Steps toward Digital Literacy In this group of users, we placed the five women interviewed in the two neighborhoods who identify as housewives or by some other activity. Their accounts evidence somewhat slower processes of approaching and appropriating technology, often through brief glimpses and opportunities to see "what the Internet's all about," how it works, and how it can serve or be useful to them.

They may have had their first contact with a computer or the Internet during one of their occasional visits to the telecenter or at the home of a relative or friend. They are starting to "discover." Their use is primarily focused on creating an email account, using Facebook, or doing a few searches with the help of someone else—perhaps the telecenter operator or a relative or friend who has more experience with technology.

In this group, digital literacy is also guided or mediated by someone close to the user, such as a relative or friend, a fact that determines *what* is used on the Internet, *how* it is used, and *for what* it is used. Unlike the other telecenter users, more specific reasons and motives appear for going to the telecenter more frequently.

I: You started to use the Internet because of your son, because you came to do homework with him. How often did you go to the telecenter?

R: They used to give him homework every three weeks; after that it was more frequent and this year as well. I went there to make photocopies for him or download information about something for him because there I could tell the woman in charge what I was looking for to download it [the information]. (Woman user #9, full-novel user of the San Hernán telecenter)

This process has been reinforced by the telecenter and supported by the help of the operator or by some training workshop. Two of these women had previous computer training, either during their studies in secondary school or another program, or from a course specifically taken outside the neighborhood, although many times they stopped practicing thereafter or did not update their training. This situation can be considered one of the obstacles to becoming a full-advanced user. Expectations related to greater "use-with-meaning" and an appropriation of technology are largely associated with continuing to learn or improving in their current activities.

Illiterate Nonusers of the Telecenter The four women in this group are distanced from both the telecenter and technology for a variety of reasons, ranging from their personal and family situation to situations that have to do with processes of "exclusion"

associated with the way the telecenter operates in the neighborhood or with how they do not feel part of community and public projects or spaces.

Their assessments are associated with their expectations or imaginaries based on what they have heard and seen about the Internet and what you can do with it—or in their words, "what I would love to be able to do."

R: It's that sometimes talking with other people that have computers—for example, this boyfriend my daughter had used to be a teacher, and he always told me that he could teach me, that it wasn't hard because I used to say that it's not just sit down and plug in, and the thing is I have so many things on my mind and it could be just another thing to worry about; but maybe not because it might be another help; and the thing is that for example with the inventories I could go to the computer and see.

I: What stops you from trying to use it?

R: The thing is I haven't made the time. You have to be there at the time and concentrate, and it's a class that you go to take, and Jorge tells me that, "with one hour of me helping you, you're going to be able to do it alone and you can get on a computer and then you start to get on the computer and it will be easier for you, and you can do it yourself." (Woman nonuser #5, San Hernán telecenter)

The constructions that women make are rooted in the particular cultural ways in which they experience their lives and in general terms are expressed in visions rooted in roles that assign them responsibility for raising their children and taking care of their homes. The Internet is present in their accounts, but it is difficult for them to grasp how it is linked to their daily lives. It is easier to understand it as something that is useful to others, mainly their children.

Nevertheless, cell phone use is common among all of them, and they all refer to it as a medium and a technology that they have managed to incorporate into a good part of their communication routines. This technological device allows them to take the first step to digital literacy, and in some cases, it should be considered a means of initiation to and practice of digital technology. All cell phone users are full users; to become advanced users, they must overcome the same limitations they face in becoming advanced users of the Internet. Despite this, they have bridged the access gap because it is already established in their daily routines. What must happen for the telecenter to become established in the same way?

The greatest familiarity with ICT is observed in users who perceive the Internet as one more communication device. Intense users are rare. In these exceptional cases, when they can access a good broadband connection and have the opportunity to make frequent use of technology, they gradually accept the idea that the Internet "opens the doors to the world," and they are taken a little bit beyond their neighborhood limits. Even so, they recognize that they are not taking advantage of the full potential of ICT.

The Telecenter from the Perspective of the Woman's Role and Mediation of the Cultural Context

In discussing the positive impacts in depth, the categories expand, allowing the beneficiaries of those impacts to speak about their own assessments and perceptions. In this process, a marked difference emerges between the forms of impact represented by *expected* goals (e.g., those implicit in the design and implementation of the program) and those that are *unexpected* (i.e., expressed with respect to the symbolic construction that people make according to the meanings that access to and use of the telecenter represent for them). The forms of impact that describe meanings that intersect with daily life, convenience, and closeness become truly valued when the telecenter is installed within the space where respondents habitually circulate, eliminating the need to travel to another venue and apparently resolving the problems associated with "alternative" forms of connection, which are not always reliable because they depend on the payment or nonpayment of service and how many people share the signal. Thus, perceiving this benefit preferentially for the children corresponds to an age distance that they construct symbolically: it is closer for *them*, and they value it as something that helps them provide a better reality for their children.

Even if it is not possible to prove a negative impact as such, one of the meanings that emerged was the *indifference* of people who, although they could be users, appear not to value the presence of the telecenter in their neighborhood. Indifference is presented as an expression of "no impact" in light of limitations that emerge in perceptions of exclusion from symbolic constructions that the subjects can come to establish (perceptions that were not contemplated when the telecenter project was designed).

Nuances also emerge that differentiate the perceptions of impact depending on the gender of the subjects. Men and women construct the possibility of approaching a public access center and using digital media in different ways.

This is expressed by the concrete demands and necessities linked to women's role as mothers and/or housewives, giving form to the access to information and services in a public place like the telecenter. The motivations for use and the methods of searching for content are generally linked to tasks related to their children (e.g., homework) or to resources that are useful to them in the domestic arena of daily life (e.g., searching for recipes), and to a lesser extent to content related to personal care (generally associated with health problems and cosmetic care). Rarely is their participation associated with experiences of use and appropriation, as far as assigning it meaning as a space and a medium that facilitates the search for information associated with small business endeavors or their personal tastes and interests (e.g., handcrafts, fashion, and religion).

The dimensions of gender and culture define not only the forms of *practical consumption* (the *what for*) but also of *symbolic consumption* (the *what it means*) of a public community space like the telecenter and of the Internet as a network and medium of communication and information.

The categories proposed—from full-advanced user to nonuser, literate or illiterate—have to do with territorial distance, but they are also symbolic of how the telecenter is perceived and recognized as a personal space that allows the average woman from these neighborhoods to make "use-with-meaning" of the services and opportunities offered by the computers connected to the Internet.

Only to the extent that the telecenter is incorporated into the personal routines of these women, somewhere between the household chores and the vegetable market shopping, does it gain value and meaning as a step toward the ultimate goal of social appropriation of ICT, particularly with respect to the dreams, goals, and life objectives they hold for themselves and their families.

From the perspective of consumption, the social impact of public access to ICT is associated with the dimensions of the connectivity offered (close, convenient, and free), mainly for use as a communication device (Facebook is also a telephone) that is preferentially individual, as opposed to communal-collective, which presents another challenge.

The promise of technology, the image of the Internet as a window onto the world and the telecenter as "a door that opens up opportunities," acquires more importance when the woman, albeit living in a context of social, economic, and cultural vulnerability, has her own dreams, a few (small) concrete goals for her life and her family's life, or a more autonomous self-image—in other words, a woman who has her own personal motivations. Otherwise, her use remains subordinate to a use that merely supports "someone else's dream."

Thus, the role of ICT in the social inclusion of women takes on meaning in the consumption of that technology and of the space that facilitates its access (such as the telecenter) according to the symbolic value adopted by a *means* (not just a tool) that is offered from a *space* (a place) whose value is related to the *everyday life* in which it weaves the pattern of its own cloth. The accounts given by both men and women reveal a direct relationship between the respondents' symbolic worlds and the ways they put those worlds into practice through a "door opener" that makes technology possible in a space like the telecenter. The more elaborate the symbolic world, the more varied the practices achieved.

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Recommendations

The positive impact of a telecenter and its digital literacy programs on the lives of women and their families can be much greater than on the lives of men partly because of the central role that women play within the family environment, but also because women initially are much more distanced from technology and public computer and Internet access centers than are men. For this reason, we propose the following recommendations.

- 1. Although in theory women and men can have equal access to cybercafés, in practice this does not happen. First, the social environment in cybercafés can sometimes be inhospitable for women; second, women, especially those living in poverty, need attention and assistance that go beyond mere physical access to technology. Hence, it is important that the State sponsor special access programs designed to service poor communities and meet the specific needs of women.
- 2. The *Quiero Mi Barrio* program and similar programs providing support to public access centers should dedicate special attention and resources to encouraging the participation of women and bringing them closer to the services and resources offered by the telecenters. The operators of the telecenters studied have played an important role in this regard, helping women approach and appropriate the technology. This role of the operators should be strengthened and even expanded through strategies that recognize the dynamics of women's social roles and everyday needs.
- 3. Digital literacy programs should embrace new models or paradigms that take into account the development of digital abilities and skills oriented toward the needs, expectations, and daily requirements of women in their different roles: for example, helping them support their children's studies and homework, attending to specific issues that concern them, and, above all, helping them realize their own dreams above and beyond their domestic duties.

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Notes

- 1. Michelle Bachelet was the first woman president of Chile. After her first presidential mandate, she served as head of the United Nations Entity for Gender Equality and the Empowerment of Women. She was subsequently elected to serve a second term (2014–2018) as president of Chile.
- 2. "Pre-u" stands for "pre-university," an educational opportunity to prepare for the university selection exam.
- 3. In Chile, it is common to refer to levels of literacy among people to describe their methods of use and appropriation of technology and public policies implemented to promote the use of technology are known as "Digital Literacy Processes."

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Appendix 11.A: Survey, Focus Groups and In-Depth Interviews

Survey

The objective of the survey was to get first impressions to guide subsequent group discussions. The survey had a non-probabilistic sample design, and considered a total catchment population of 1,384 people for the telecenter in the Metropolitan Region (San Francisco de Asis Settlement) and 3,579 people for the telecenter in the O'Higgins Region (San Hernán Town). The survey was conducted between July 26 and September 11, 2010, and was administered to men and women 18 years of age or older, both users and nonusers, who lived within the radius of primary influence of the telecenters.

Focus Groups

The focus groups correspond to user and nonuser profiles. Only five sessions of a proposed initial total of six were held. Focus group participants were selected from among

Table 11.A.1Number of Survey Interviewees by Center

	San Francisco	San Hernán	Both areas
Women			
Users	51	50	101
Nonusers		25	42
Users of the Internet, nonusers of the Telecenter	26	23	49
Subtotal	94	98	192
Men			
Users	20	22	42
Nonusers	9	18	27
Users of the Internet, nonusers of the Telecenter	20	14	34
Subtotal	49	54	103
Total	143	152	295

those who responded to the survey and indicated their availability to attend and from a list of local residents identified through the contact networks the research assistants were able to build in the two neighborhoods. The invitations were extended in person, followed by a written reminder of the date, time, and place of the meeting.

The sessions took place in August and September 2010 and were recorded with the express permission of the attendees.

In-Depth Interviews

The selection of interviewees was carried out in a non-probabilistic manner, starting with individual invitations to some of the focus group participants and to local

Table 11.A.2Number of Focus Groups Held by Center

	San Francisco	San Hernán	Both Areas
Women			
Users	2	_	2
Nonusers	1	1	2
Subtotal	3	1	4
Men			
Users	1	_	1
Nonusers	-	-	-
Subtotal	1	_	1
Total	1	0	5

Table 11.A.3Number of In-depth Interviewees by Center

	San Francisco	San Hernán	Both Areas
Women			
Users	6	4	10
Nonusers	1	3	4
Subtotal	7	7	14
Men			
Users	3	2	5
Nonusers	1	1	2
Subtotal	4	3	7
Total	11	21	21

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residents identified through the researchers' contact networks in the two neighborhoods. The interviews were conducted in people's homes by mutual agreement of the two parties, at the telecenter, or at the neighborhood community center, preferably on Thursdays, Fridays, and Saturdays. These interviews, the most time-consuming part of the study, were carried out between September and December 2010.

Four of the women users but none of the nonusers had a home computer connected to the Internet. Two of the men users but none of the nonusers had a home computer connected to the Internet.

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