

# "Not even with social distancing!"

*A look at who did not connect to the internet in Peru during the pandemic*



COVID-19 Responses for Equity

December 2022

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Cover photo: Freepik

## I. Introduction

The year 2020 will go down in history as the year that humanity was locked up and locked down, even with the internet—the network of networks—reaching across the entire planet. By that same year, Latin America and the Caribbean had an infrastructure for interconnection and distribution of internet content that had developed significantly in the previous years. Internet Exchange Points (IXP) and content delivery networks (CDN) continue to expand their presence in the region (Echeverría, 2020). It seemed that connecting to the internet was at least an option for people.

Unfortunately, even though internet access tends to be seen as a challenge that middle-income countries like Peru have overcome, the truth is that not only is access a problem for the poorest people or those farthest from urban areas, but its use and appropriation by those who do have access depend on a set of factors closely associated with socioeconomic status, education, and gender (Katz, Jung and Callorda, 2020; Galperin, 2017).

Inequalities in access, use, and appropriation constitute a problem to be solved. As if this were not enough, society faces another problem. There is a subset of people who do not connect to the internet, whom we will call the Disconnected. The International Telecommunication Union (ITU) and Unesco define anyone who has not used the internet in the last three months as a disconnected person.

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As part of the *COVID-19 Responses for Equity* project, funded by Canada's International Development Research Centre (IDRC), The Institute of Peruvian Studies (IEP, for its acronym in Spanish) had the opportunity to collect information in August 2020 and April 2022 based on a nationally representative survey of those with a working cell phone in urban areas.

The good news for Peru is that the proportion of disconnected people, according to the international definition, decreased by half: from 15.87% to 8.86%. This is an encouraging finding for our study population: people living in urban areas with a working cell phone who have not connected to the internet in the last three months.

Understanding the characteristics of people who are disconnected is critical for designing public policies that will successfully insert them into the digital economy, so that they can enjoy all the benefits deriving from this insertion. Of course, as part of this process, they must be informed of internet-related risks and given the tools to mitigate them.

This paper is structured as follows. First, the Disconnected are analyzed according to age group, followed by gender, socioeconomic level, last level of education attained, and occupation. Next, we take an in-depth look at this population's ownership of personal use devices. Finally, perceptions about the internet are shown and we conclude with a summary of the profile of the Disconnected.

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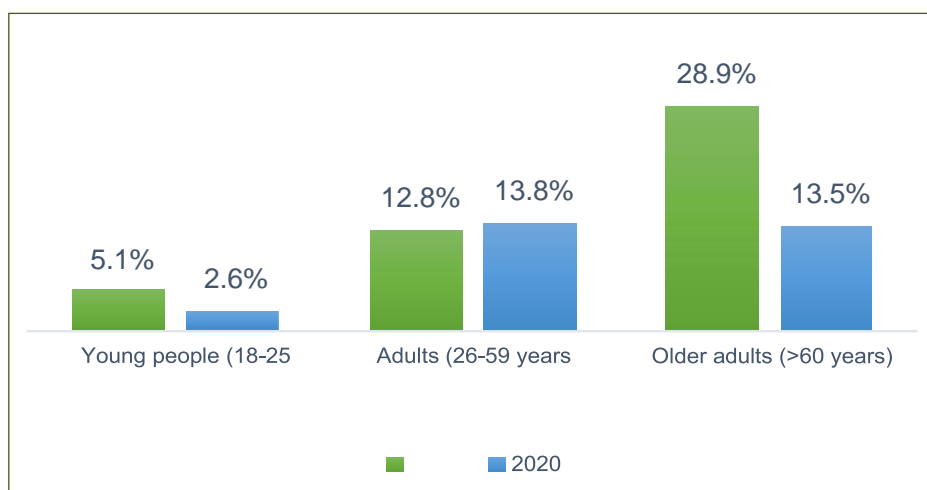
## II. Age

When it comes to drawing conclusions based on age, the expectation is that the majority of young people, mostly students, are almost entirely connected; that adults are also connected, but to a lesser extent; and that older adults exhibit the lowest proportion of connected people compared to the other two age groups.

The data from our 2020 survey confirms these expectations: the proportion of connected people, by age group, declines as older age groups are taken into account. When compared to the 2022 survey, very interesting results are observed for younger age groups (under 25) and older age groups (over 60). In both cases, the proportion of the Disconnected drops by half: only 2.6% and 13.5%, respectively, in 2022. We can affirm that, during the pandemic, the share of young people and older adults connected to the internet increased.

What is striking is that the proportion of disconnected adults (between 26 and 59 years of age) did not vary. Moreover, the same proportion of adults and older adults was the same, as seen in Graph 1.

GRAPH 1. PERCENTAGE OF THE DISCONNECTED DISAGGREGATED BY AGE



Source: IEP 2020 (N=119 people) and 2022 (N=72 people) survey. Institute of Peruvian Studies.

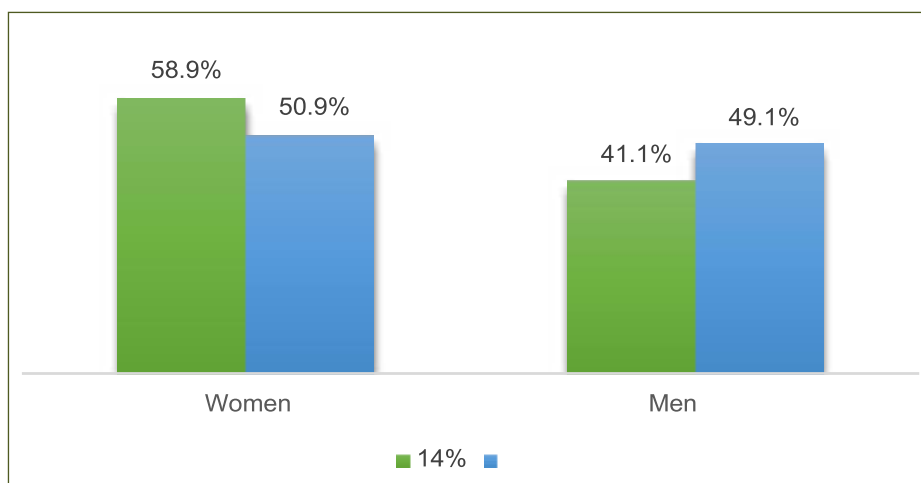
### III. Gender

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Extensive empirical studies have documented the digital gender divide in the field of information and communication technologies (ICT). According to Robinson et al., (2015), factors such as education, employment, or discrimination play a determining role in the technology gap. For example, in a study conducted by Barrantes, Agüero and Matos (2018)—who developed an indicator that reflects the ICT gender gap for five countries in the region (Argentina, Colombia, Guatemala, Peru, and Paraguay)—it is evident that more education and a higher socioeconomic level and living with children and young people have a positive and statistically significant impact on reducing this divide. On the other hand, being an older adult, living in a rural area, and speaking the local language tend to be factors that reduce this indicator. Additionally, in Paraguay and Argentina, factors such as education or age play a bigger role in explaining the gender gap. In contrast, in Peru and Guatemala, unobserved factors contribute a greater proportion.

Graph 2 shows that, with the pandemic, the digital gender divide was virtually eliminated. In 2020, the Disconnected were predominantly female. In 2022, the proportions of disconnected men and women are almost the same.

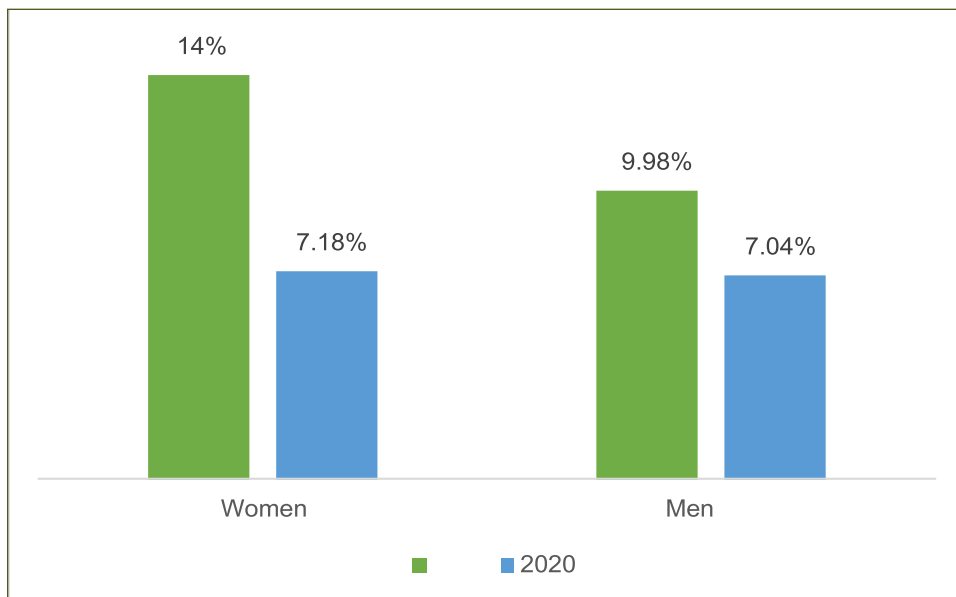
Graph 2: PERCENTAGE OF THE DISCONNECTED BY GENDER



Source: IEP 2020 (N=70 women and 49 men) and 2022 (N=37 women and 35 men) surveys. Institute of Peruvian Studies.

But this is not the only interesting gender data on the Disconnected. In terms of the proportion of each gender within the universe of respondents, the proportion of disconnected women fell by almost half, while the proportion of disconnected men dropped just under 3%. During the pandemic, rapid digitalization is associated with the elimination of the gender gap in internet access.

Graph 3. THE PROPORTION OF THE DISCONNECTED BY GENDER



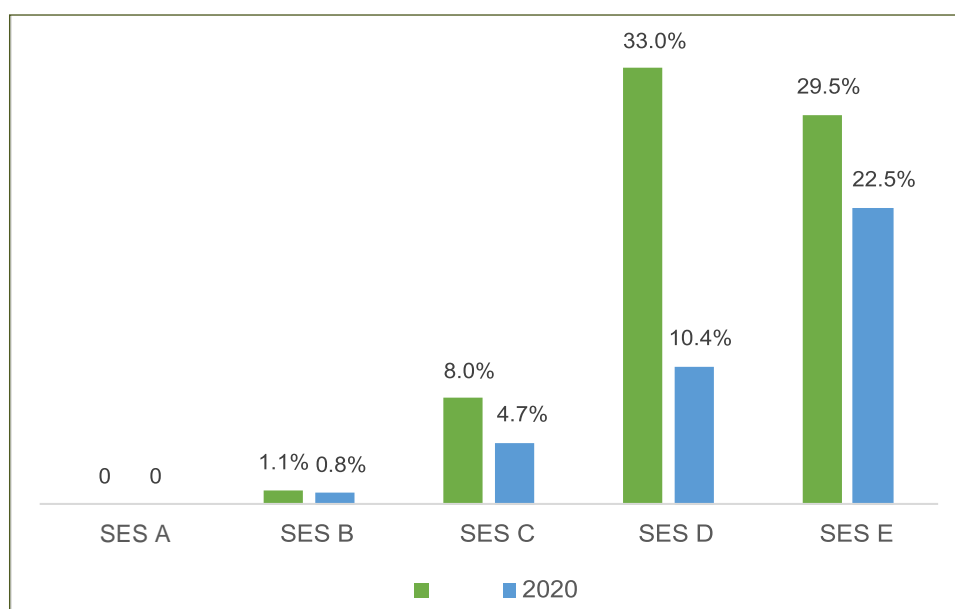
Source: IEP 2020 (N=70 women and 49 men) and 2022 (N=37 women and 35 men) surveys. Institute of Peruvian Studies.

## IV. Socioeconomic level

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When the Disconnected are disaggregated by socioeconomic status (SES), there is a significant decrease in all strata, except for SES A, where there are no disconnected persons. SES D registered the biggest drop in the number of Disconnected persons: from one-third at the beginning of the pandemic to only one-tenth in April 2022. Despite the proportional reduction for SES E (from 29.5% to 22.5%), the fact that 1 in 5 people in this SES is still not connected to the internet poses a fundamental challenge for e-government or social assistance initiatives.

Graph 4. THE PROPORTION OF THE DISCONNECTED BY SES



Source: IEP 2020 (N=119 people) and 2022 (N=72 people) survey.

Note: Graph 4 presents the ratio of disconnected by SES. Institute of Peruvian Studies.

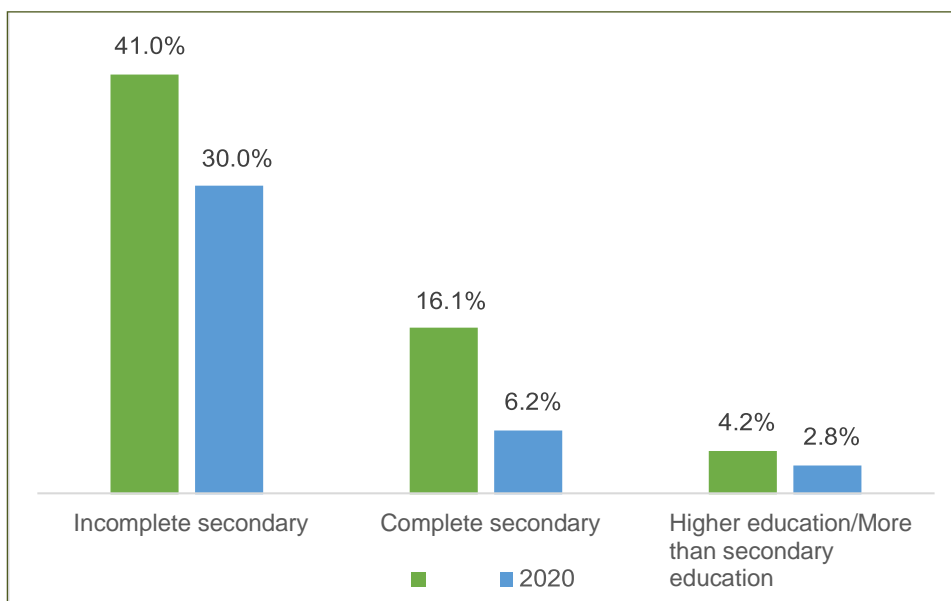


## V. Educational level

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The bulk of the Disconnected corresponds to people who have not completed secondary school, followed by those who did but did not continue their education.

Graph 5. THE PROPORTION OF THE DISCONNECTED BY LAST LEVEL OF EDUCATION ATTAINED



Source: IEP 2020 (N=119 people) and 2022 (N=72 people) survey. Institute of Peruvian Studies.

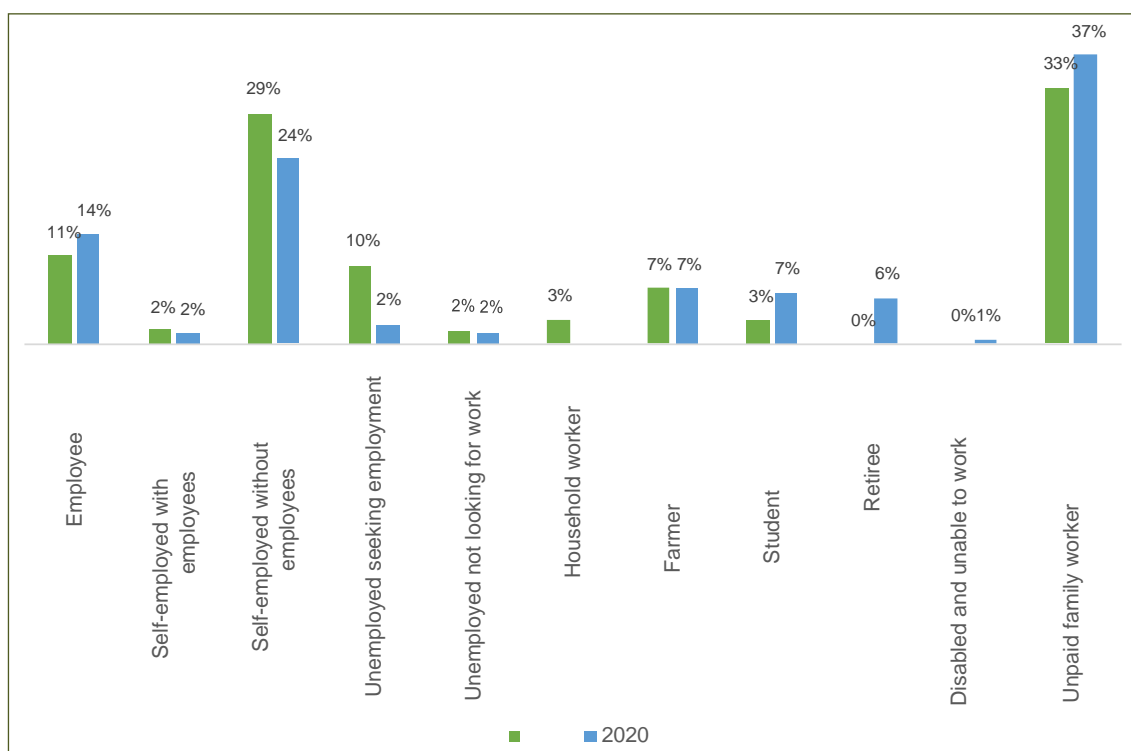
Note: Graph 5 shows the ratio of Disconnected by last level of education achieved.

## VI. Occupation

This paper examines the occupations of the Disconnected from two perspectives. The first is how the universe of the Disconnected is distributed in each period and how it changed over the two years of the pandemic. The second perspective focuses on occupations and analyzes the importance of the Disconnected in each of them.

With respect to the first perspective, which can be seen in Graph 6, the most prominent among the Disconnected in 2020 are unpaid family workers (one-third), self-employed workers without employees (29%), employees (11%), and unemployed job seekers (10%). By 2022, the percentage of unpaid family workers (37%) and employees (14%) increases, surprisingly.

Graph 6. PERCENTAGE OF THE DISCONNECTED IN EACH OCCUPATION

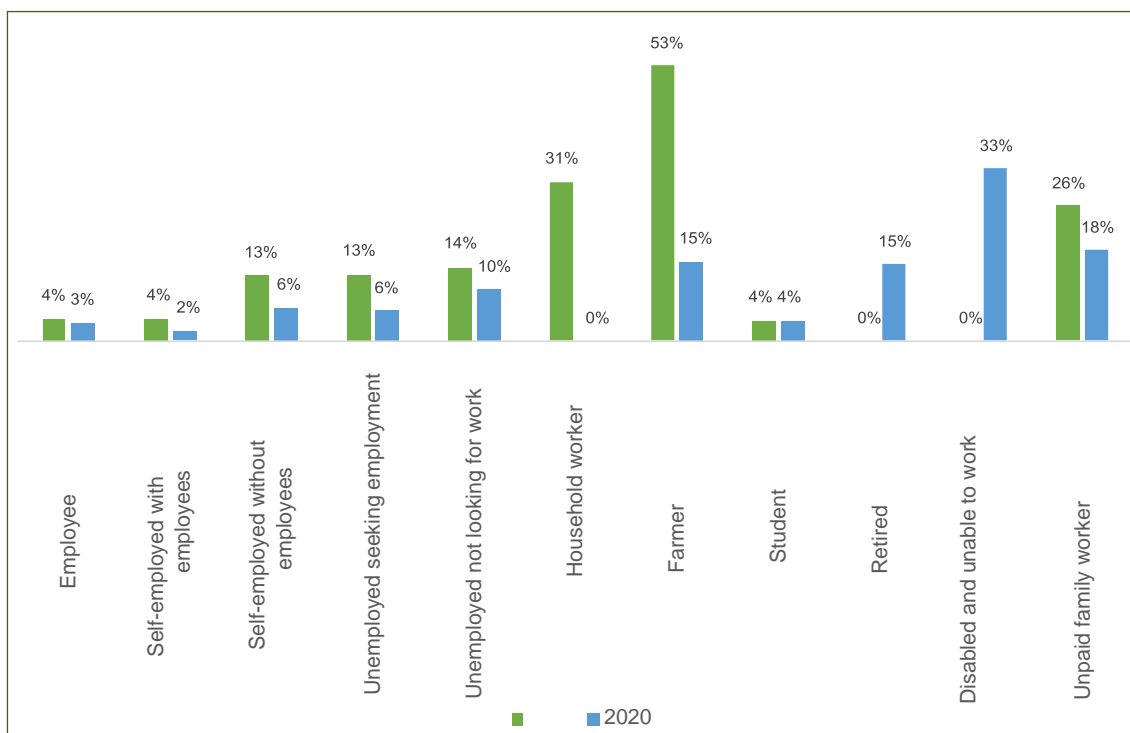


Source: IEP 2020 (N=119 people) and 2022 (N=72 people) survey. Institute of Peruvian Studies.

In the second approach (Graph 7), placing the focus on occupation and the proportion of the disconnected in each one, the most dramatic change is seen among agricultural and livestock workers, for whom the number of disconnected workers dropped from more than half in 2020 to only 15% in 2022. It is important to note that one-third of disabled

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individuals became disconnected in 2022.

Graph 7. THE PROPORTION OF THE DISCONNECTED IN EACH OCCUPATION



Source: IEP 2020 (N=119 people) and 2022 (N=72 people) survey. Institute of Peruvian Studies.

Note: Graph 7 shows the ratio of the Disconnected by occupation.

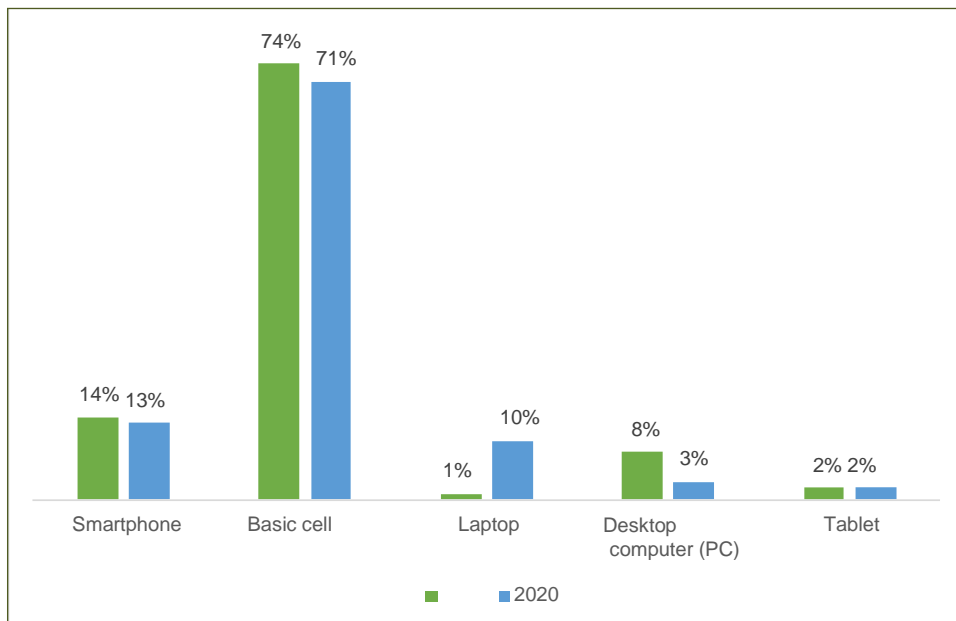
But could it be that the Disconnected don't have cell phones?

Well, no. In the first place, the survey was conducted by telephone using the universe of cell phone numbers with which IEP's Opinion area typically works. So, they do have cell phones.

The analysis—performed using the two previous perspectives—shows how the Disconnected are distributed, on the one hand, and the type of device they own, on the other.

Regarding the first approach, Graph 8 shows that more than 70% of the Disconnected, in both periods, only have a basic cell phone, followed by those who own Smartphones, which, in theory, give them access to the internet, unlike the basic cell phone.

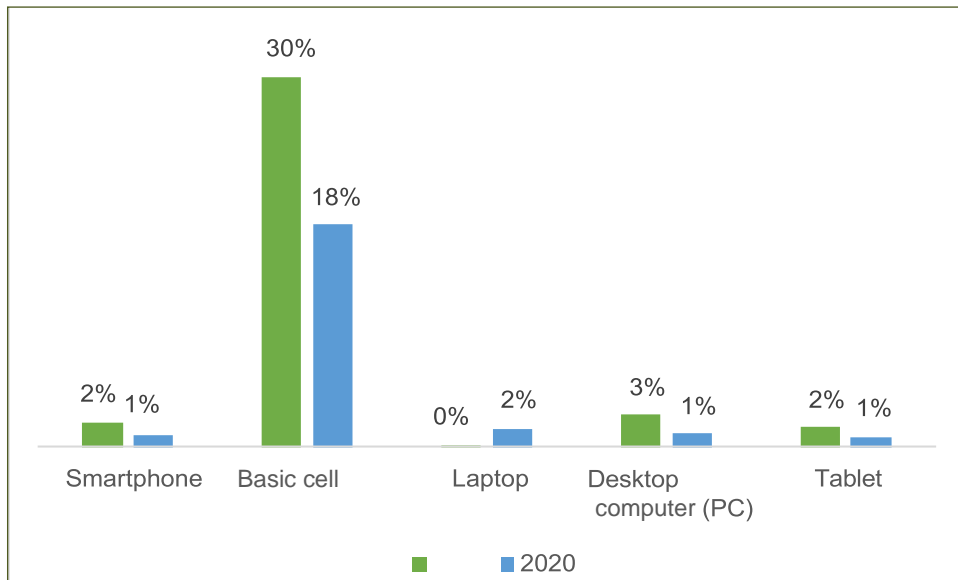
PERCENTAGE OF THE DISCONNECTED BY OWNERSHIP OF PERSONAL DEVICES



Source: IEP 2020 (N=119 people) and 2022 (N=72 people) survey. Institute of Peruvian Studies.

Regarding the second approach, which focuses on each device, what stands out is that even with a basic cell phone, a significant set of those individuals who only have that device are internet users. And this group increases significantly during the pandemic.

Graph 9. THE PROPORTION OF the DISCONNECTED  
BASED ON OWNERSHIP OF PERSONAL DEVICES



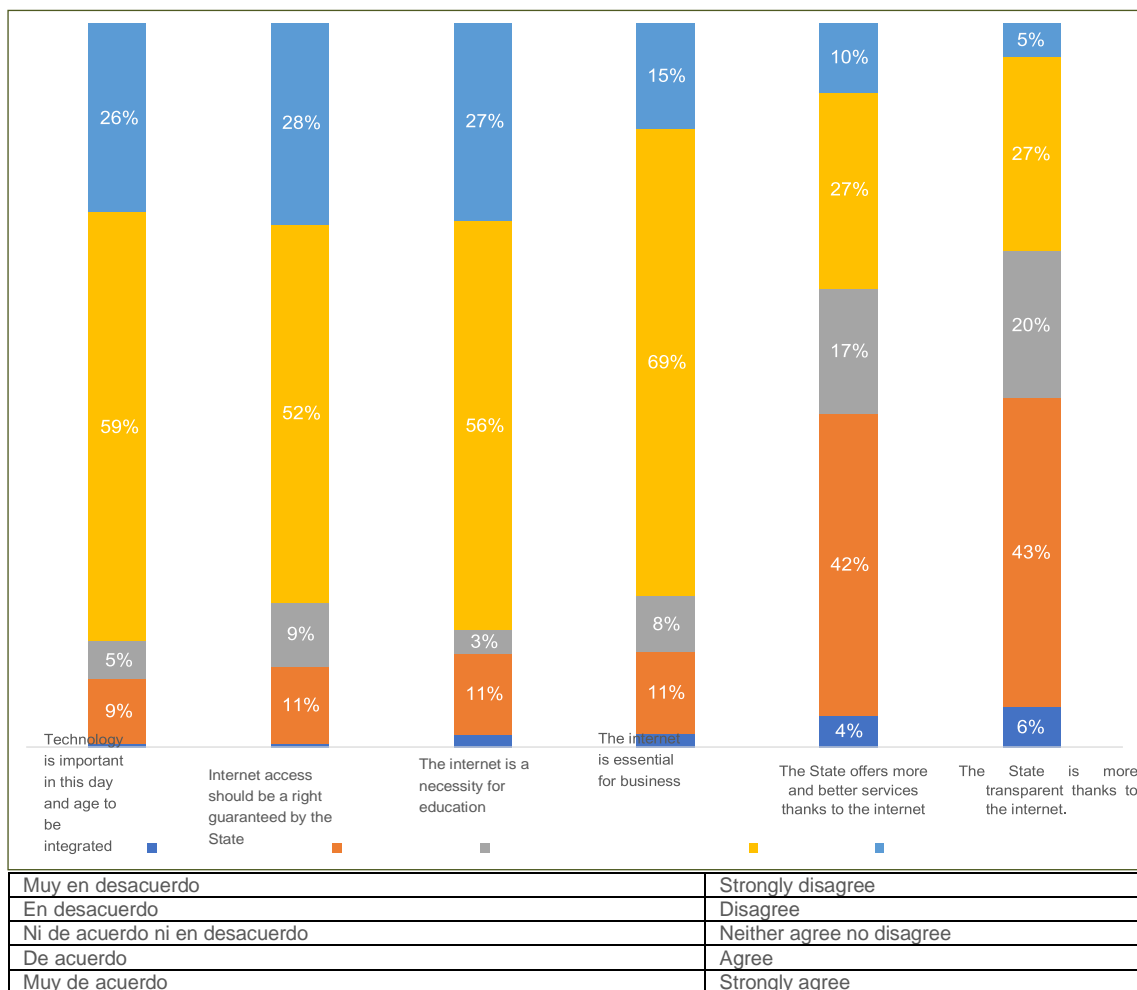
Source: IEP 2020 (N=119 people) and 2022 (N=72 people) survey. Institute of Peruvian Studies.

## VII. Internet perceptions held by the Disconnected

In 2020, we formulated a broad set of statements for which we asked respondents to indicate, on a scale of 1 to 5, how strongly they agreed or strongly disagreed with each one. Graph 10 presents the agreement distribution for each statement based on the responses of the Disconnected.

Despite being disconnected from the internet in August 2020, more than 70% of the Disconnected agree that technologies are important to be integrated; that access to the internet should be a right guaranteed by the state; that the internet is necessary for education; and that it is fundamental for business. On the other hand, less than 40% of the Disconnected agree that the internet contributes to broadening the scope of the state to provide more and better services or enables greater transparency.

Graph 10: THE PROPORTION OF PERCEPTIONS ABOUT THE INTERNET HELD BY THE DISCONNECTED (2020)



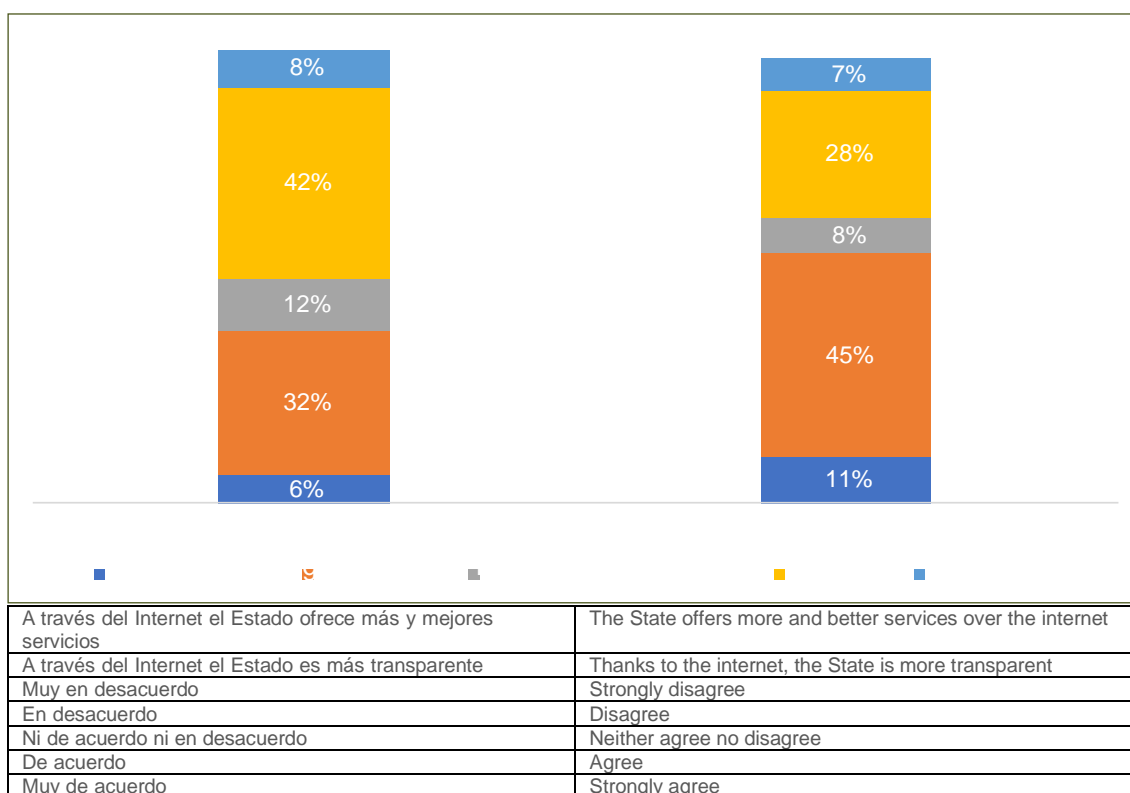
*Not even with social distancing!*

*Source: IEP 2020 Survey (N=119 persons). Institute of Peruvian Studies.*



In 2022, we only presented interviewees with the last two statements to gather their opinions. The hypothesis was that the efforts made by the government to use internet platforms to provide information and services would resonate with citizens and be reflected in their opinions. In both cases, the percentage of the Disconnected in agreement increased, reaching 50% of the Disconnected in agreement with the statement that thanks to the internet the state offers more and better services (compared to 37% in 2020); and 35% of the Disconnected (compared to 32% in 2020) for whom the internet contributes to making the state more transparent.

Graph 11. THE PROPORTION OF PERCEPTIONS OF THE INTERNET HELD BY THE DISCONNECTED (2022)



Source: IEP 2022 Survey (N=72 people). Institute of Peruvian Studies.

## VIII. Final remarks

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This brief paper describes the population disconnected from the internet at the beginning (August 2020) of the pandemic and compares it with the disconnected population in April 2022. The basis of our analysis is constituted by two representative surveys of the urban population with cell phone numbers, similar to those used in opinion and political preference surveys.

The data show that the percentage of disconnected people was reduced by half in that period. Moreover, it also allows us to highlight a set of demographic and socioeconomic characteristics of that sample. This set of criteria allows us to create a profile of the typical disconnected person in 2020: she was a woman, over 60 years of age, who had not completed high school, was employed as an unpaid family worker, from the socioeconomic stratum D, and owns a basic cell phone.

By April 2022, it is no longer possible to indicate whether the typical disconnected person is male or female. This is a very encouraging finding in terms of eliminating the gender gap. In terms of age, there has been a relative stagnation in the increase of connected people among adults. Today, the typical disconnected individual is over 25 years old. The rest of the characteristics of the typical disconnected person remain the same, highlighting the possible association between informality and disconnection, indicated by the occupations that predominate among the disconnected: unpaid family workers or self-employed workers without employees, during the pandemic.

As always, we have two ways of assessing this information. Adopting a pessimistic view, we can say that we missed the opportunity to achieve digital universalization. Taking an optimistic stance, reducing by half the proportion of disconnected people represents a big step toward that goal. Moreover, it was achieved in just a couple of years. That said, there is still a need for research into the factors that explain the subsistence of this core group of people who were unable to connect to the internet even when it was the main channel of daily connection with the outside world during covid.

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