ICT Access and Use in Peru and Colombia during the COVID-19 Pandemic: The Big Picture

Covid-19 Responses for Equity Initiative

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Introduction

The health crisis generated by the spread of the COVID-19 virus has highlighted the importance of access to and use of Information and Communication Technologies (ICT). These have been fundamental elements during confinement to work, study, procure food, obtain information of various kinds, maintain communication with family and friends, carry out banking transactions, reactivate the economy, etc.

In this regard, the current situation has exposed the disadvantages of those who do not have ICT devices and/or those who do not know how to use them, thus making the digital divide the new face of inequality in Latin America. It has become clear that connectivity is not sufficient for the appropriation of digital tools (Van Dijk & Hacker, 2003); that there are significant differences between urban and rural areas in terms of technology availability and use (Barrantes et al., 2020); that some age groups face disadvantages in use (Barrantes & Cozzubo, 2015); that low income levels are related to low uses and availability of technologies (Srinuan & Bohlin, 2011); that more attention should be given to issues of privacy and security of personal information (Barrantes et al., 2019); and several other aspects in which digitalization has taken place.

Within this framework, this document, which is a research effort carried out in the current context of the COVID-19 pandemic, seeks to provide information on the situation of ICT use in Peru and Colombia, make the main challenges visible, and provide elements for the discussion of public policies.[1] The basis for this study is information gathered through a telephone survey specialized in ICT issues carried out in December 2020 in Peru and Colombia with a sample of 1000 observations in each country. The analysis also takes into account differences between different social groups, such as those resulting from gender, age group and socioeconomic level. The first section provides information on device ownership, Internet connectivity and use, while the second section illustrates awareness of government support provided by COVID-19. It then reports on changes in internet use and barriers to ICT use, as well as the population's attitudes toward the Internet. The document closes with an assessment of these results.

[1] Study was developed within the framework of the CORE project (COVID-19 Responses for Equity) led by the Instituto de Estudios Peruanos, in Latin America; LIRNEasia, in Asia; and Research ICT Africa, in Africa, with financing from the IDRC in Canada.

1. Ownership of devices, connectivity, and use of the Internet

First, the information about the devices available for personal use is presented. Overall, 80% of the population in urban Peru has a smartphone; 31% have a basic cell phone (without internet access); 34%, a laptop; 28%, a desktop computer; and, finally, 13%, a tablet. Similarly, in the case of Colombia, 96% have smartphones; 12%, a basic cell phone (without internet access); 62%, a laptop; 34%, a desktop computer; and 21%, a tablet. Clearly, smartphones are much more widespread in both countries, probably because of their ease of use and practicality, as well as their lower cost compared to the other devices mentioned. Tablet ownership is the lowest among the devices analyzed.

It is useful to delve deeper into these results and analyze differences by gender and age group. When considering the first of these dimensions, we find advantages for men in terms of ownership of smartphones, laptops, and tablets **(see Table 1)**. In terms of age, the 18 to 25 age group presents higher percentages in the ownership of smartphones and laptops, while the highest percentage for basic cell phones is found in the over 60 age group **(see Table 2)**. Although these results have been found in previous studies,[2] in the current context of the pandemic, it is even more important to identify those groups facing disadvantages in accessing and using the Internet broken down by the different types of ICT devices.

Table 1. Access to devices for personal use broken down by gender—% of people

Device	Colombia		Peru	
	Men	Women	Men	Women
Smartphone	97%	96%	84%	77%
Basic cell phone	13%	12%	32%	31%
Laptop	64%	59%	37%	30%
Desktop computer	36%	32%	28%	28%
Tablet	21%	21%	15%	11%

Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The number of observations reported in the table corresponds to the total sample. The data corresponds to the response to the following question: "Do you have access to a smartphone/basic cell phone (that cannot connect to the Internet)/laptop/desktop computer (PC)/tablet for your personal use."

Source: IEP Survey (2020). Authors.

[2] See example: https://olatics.net/wp-content/uploads/2018/02/Panorama-general-uso-TIC.pdf (Last reviewed on April 20, 2021)

1. Ownership of devices, connectivity, and use of the Internet

Table 2. Access to devices for personal use broken down by age —% of people

Dispositivo	Colombia			Peru		
	18-25 años	20-60 años	>60 años	18-25 años	20-60 años	>60 años
Smartphone	96%	97%	85%	88%	79%	71%
Basic cell phone	14%	11%	21%	27%	32%	42%
Laptop	69%	61%	36%	45%	30%	31%
Desktop computer	31%	35%	31%	26%	29%	23%
Tablet	16%	22%	23%	16%	12%	20%

Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The number of observations reported in the table corresponds to the total sample. The data corresponds to the response to the following question: "Do you have access to a smartphone/basic cell phone (that cannot connect to the Internet)/laptop/desktop computer (PC)/tablet for your personal use."

Source: IEP Survey (2020). Authors.

We asked respondents if they had used this service in the last three months. Eighty-four percent (84%) and 98% of people in urban areas in Peru and Colombia (respectively) reported they had used the Internet in the last three months. But, there were marked differences between certain social groups. For example, when comparing men and women, the percentage for the latter is lower (and the gap is greater in Peru); likewise, when considering age groups, the lowest percentage corresponds to people over 60 years of age (and the gap is greater in Peru). Finally, socioeconomic levels (SEL) D and E have the lowest percentages in relation to other SEL.

Table 3. Internet use in the past three months broken down by social groups—% of people

	Colombia	Peru
Gender		
Women	97%	81%
Men	98%	87%
Age		
18-25	98%	93%
26-60	98%	83%
>60	87%	64%
Socioeconomic level (SEL)		
A	97%	100%
B	98%	97%
C	98%	89%
D	98%	72%
E	94%	73%

Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The number of observations reported in the table corresponds to the total sample. The data corresponds to the response to the following question: "In the last three months, have you used the Internet to view Facebook, WhatsApp or any other type of content?"

Source: IEP Survey (2020). Authors.

1. Ownership of devices, connectivity, and use of the Internet

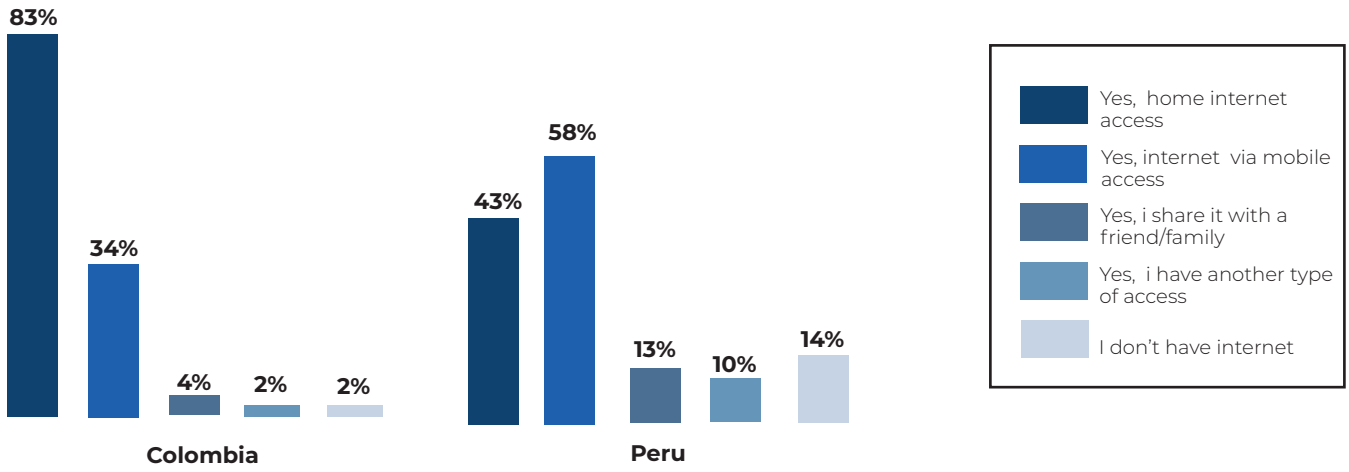
A fundamental aspect to take into consideration is the type of internet connection in the home because the user experience will depend largely on this, as well as the type of activities that they can carry out online. In this case, 58% of urban Peru accesses the Internet from the place where they live using their mobile data, while just over 43% does so with a contracted connection for the home.

Moreover, a significant 14% do not have internet where they live. There is an interesting contrast when comparing these results with the case of Colombia. The most contracted type of internet access is fixed internet: 8 out of 10 people living in urban areas in Colombia have internet contracted at home, while 3 out of 10 use mobile data to connect to the Internet at home. These results show that internet access from mobile phones has become an alternative for carrying out activities from home.

When this information is analyzed by age group, use of mobile data for home internet access predominates among 18- to 25-year-olds and 26- to 59-year-olds; for those over 60 years of age, the highest percentage is in the category of home internet service, but there are 22% of older adults who report not having this service **(see panel A in Figure 2)**.

Moreover, this age group faces disadvantages in complying with social distancing measures; it is difficult for them, for example, to use internet banking, online ordering apps, or additional information channels. As mentioned earlier, the most commonly used type of internet access in Colombia is home internet services, followed by mobile data internet connections.

Figure 1. Type of Internet Access in the place where you reside, broken down by gender—% of people



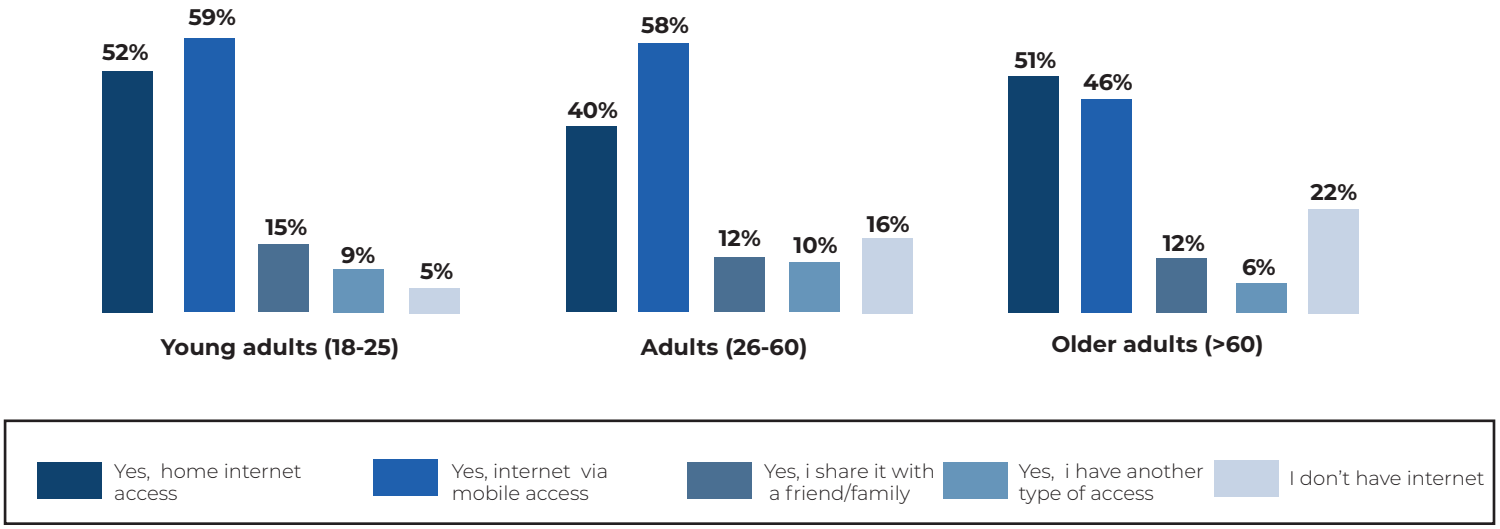
Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The number of observations reported in the figure corresponds to the total sample. The data corresponds to the response to the following question: "Do you have internet access in the place where you reside?"

Source: IEP Survey (2020). Authors.

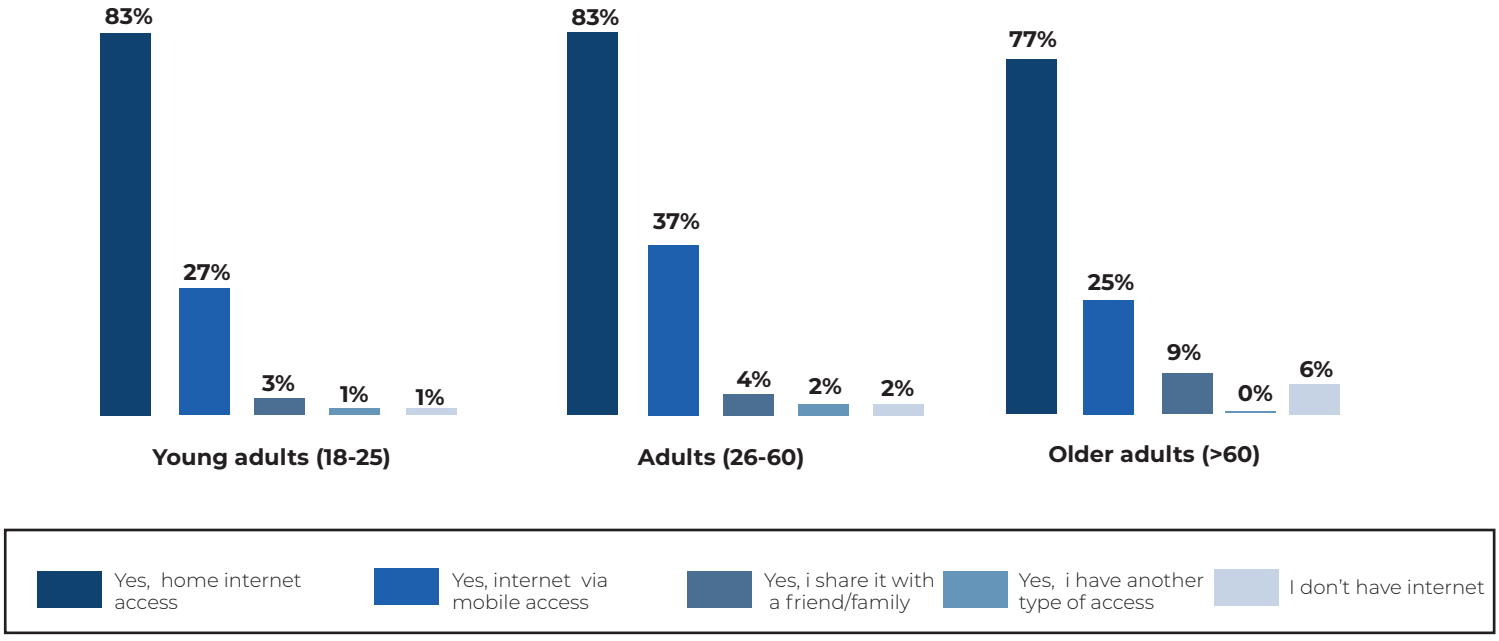
1. Ownership of devices, connectivity, and use of the Internet

Figure 2. Type of Internet Access in the place where you reside, broken down by age—% of people

a. Peru



b. Colombia



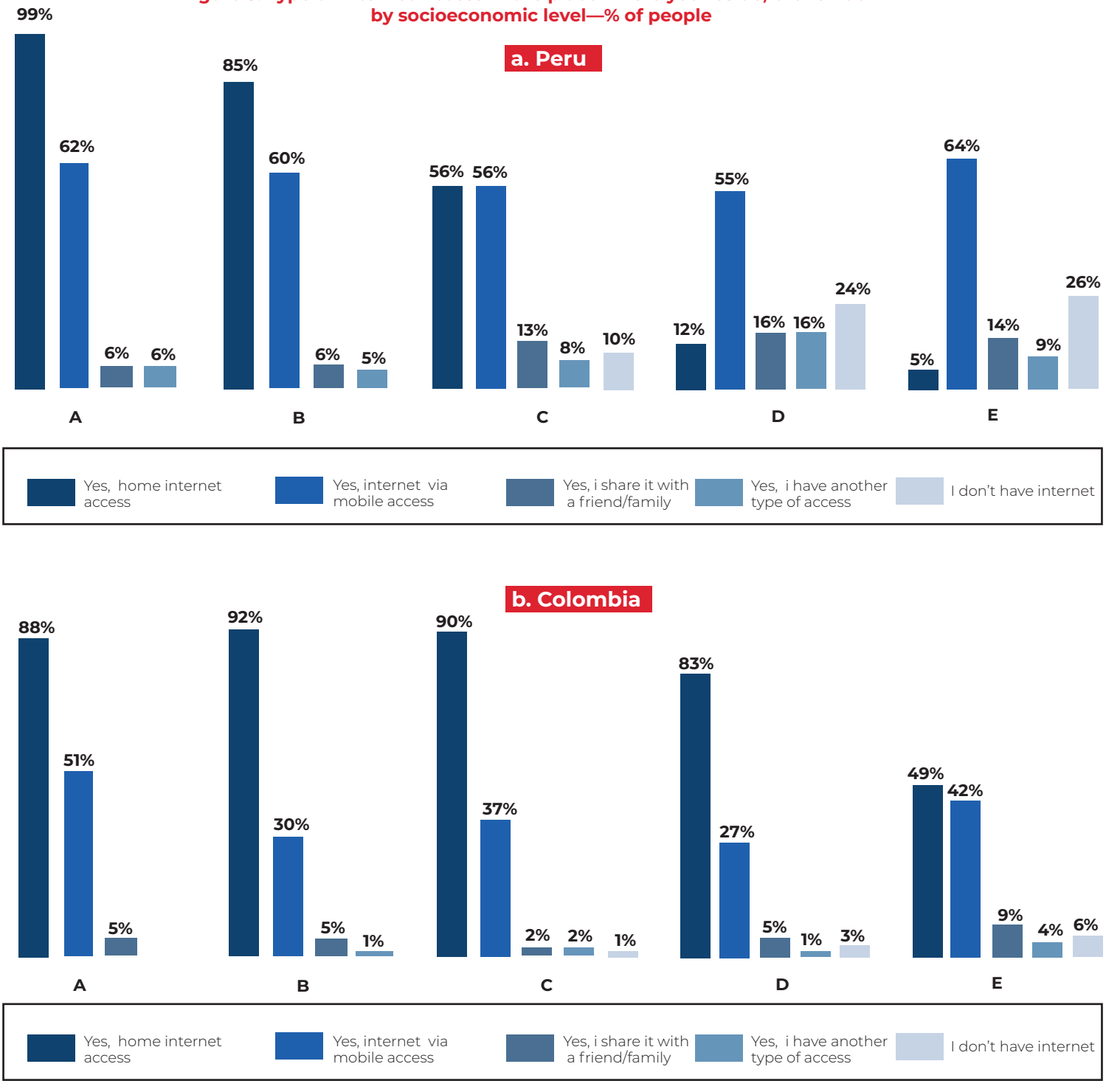
Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The number of observations reported in the figure corresponds to the total sample. The data corresponds to the response to the following question: "Do you have internet access in the place where you reside?"

Source: IEP Survey (2020). Authors.

1. Ownership of devices, connectivity, and use of the Internet

The information disaggregated by SEL reflects a major problem, especially for levels D and E in Peru, where internet access through a home internet service is lower, and where it is more common not to have this service **(see Figure 3)**. For Colombia, the differences in the percentage of people who have home internet service are more noticeable in the lowest SEL (SEL E), but there is no change in the ranking of the most common connection type, as in Peru. It is also necessary to highlight the importance of mobile data for internet access in all SELs, which becomes even more relevant for the lowest ones.

Figure 3. Type of Internet Access in the place where you reside, broken down by socioeconomic level—% of people



Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The number of observations reported in the figure corresponds to the total sample. The data corresponds to the response to the following question: "Do you have internet access in the place where you live?"

Source: IEP Survey (2020). Authors.

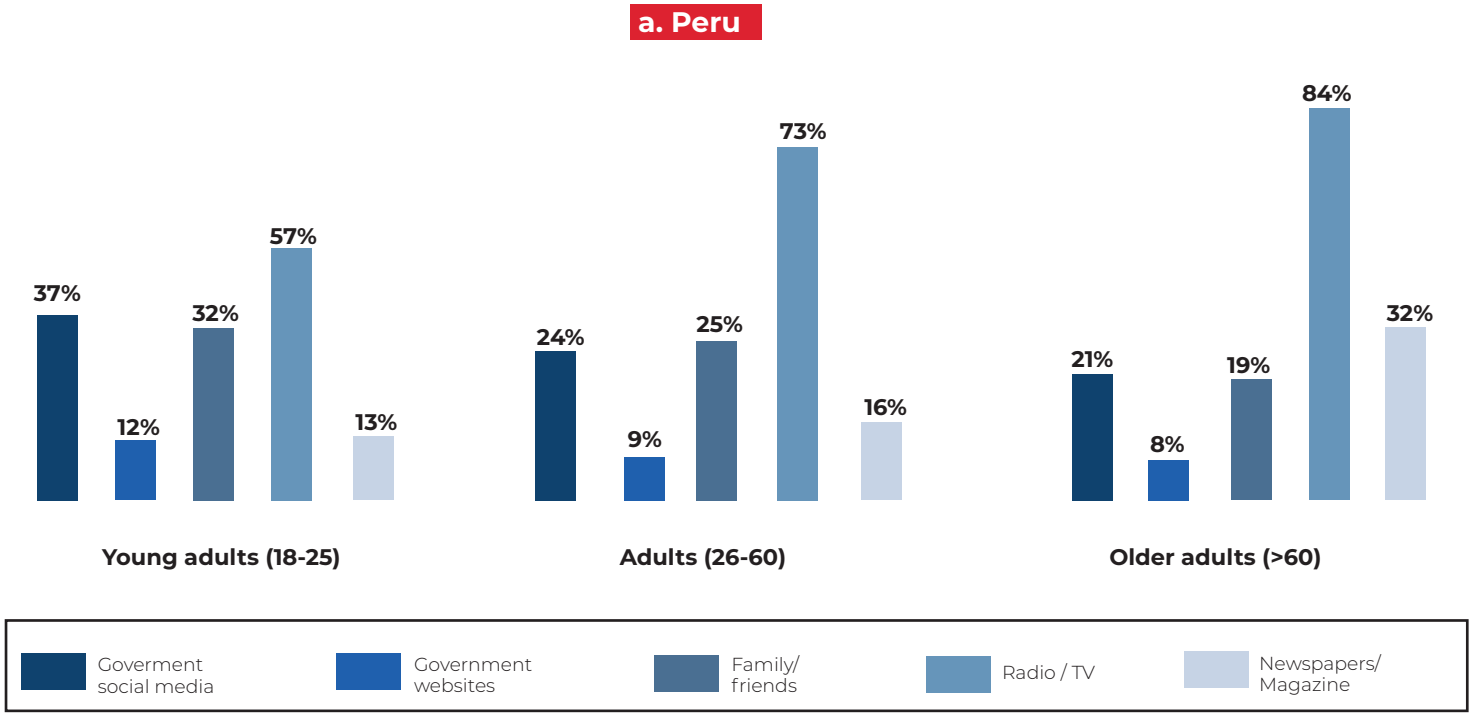
2. Knowledge of state support related to the health emergency

In Peru and Colombia, in response to confinement measures, loss of employment, and scarce economic resources, a series of policies were implemented to support the population, consisting of bonu ses, or economic aid and food (Chacaltana, 2020; Jaramillo & Ñopo, 2020; Álvarez et al., 2020; World Bank, 2020).

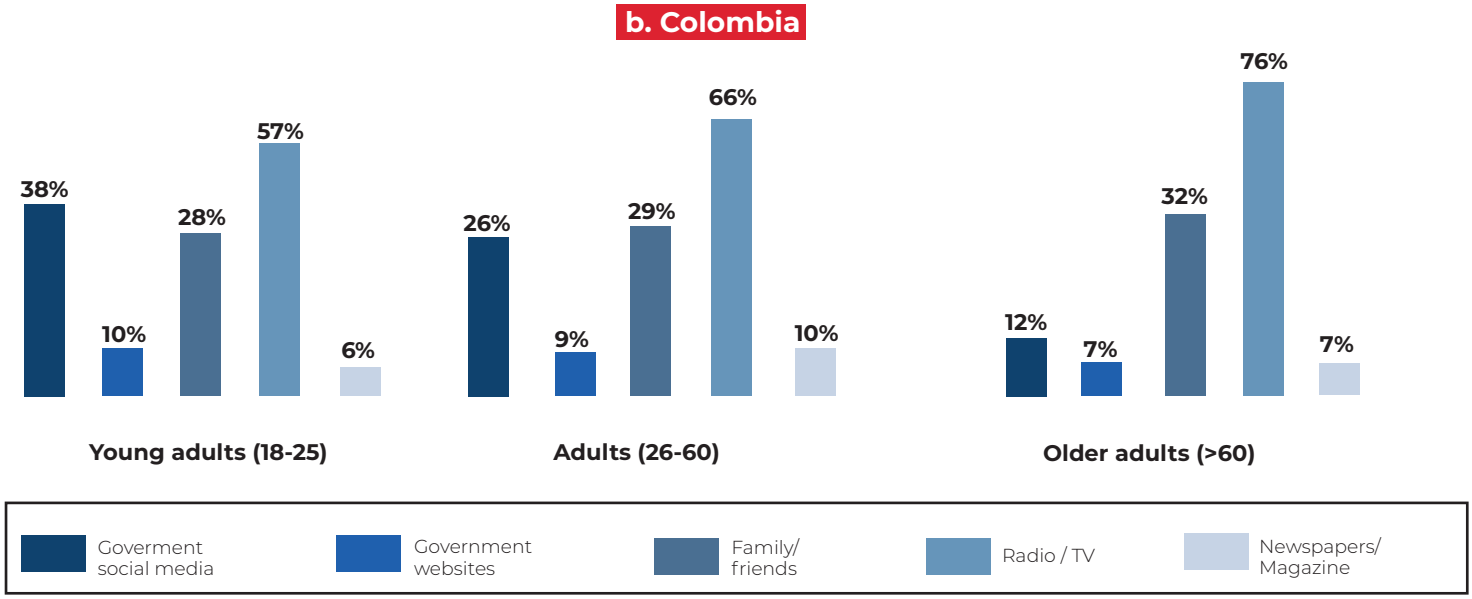
The results of the IEP survey (2020) showed that most people in Peru and Colombia have learned about the existence of these vouchers or aid via traditional media, such as radio and television (65% and 70% of people in Colombia and Peru, respectively); secondly, new technologies (social networks and websites) do not constitute the main means of access to information **(see Figures 4 and 5)**. These results are useful for the State to think of an adequate effective communication strategy, according to the characteristics and preferences of the population.

The age group analysis shows that traditional media are preferred in each of these groups, especially for older adults (over 60 years of age). For younger people, as can be expected due to their high connection with new technologies (Barrantes & Cozzubo, 2015), government social networks also have some importance **(see Figure 4)**.

Figure 4. Channels of information on government assistance during the pandemic, broken down by age—% of people



2. Knowledge of state support related to the health emergency

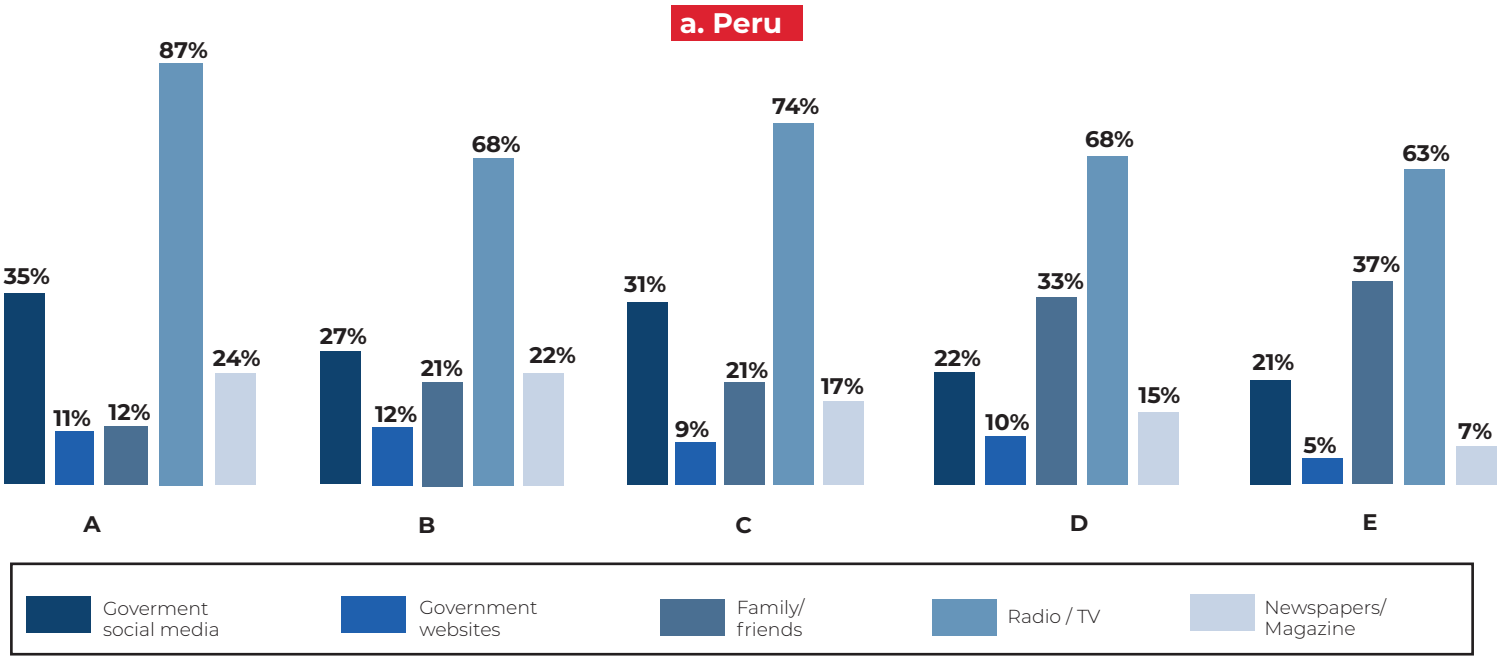


Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people who said they were aware of the assistance provided by the Government in the context of the pandemic. The data correspond to the response to the following question: "Are you aware of the vouchers or any type of assistance provided by the government during the pandemic?

Source: IEP Survey (2020). Authors.

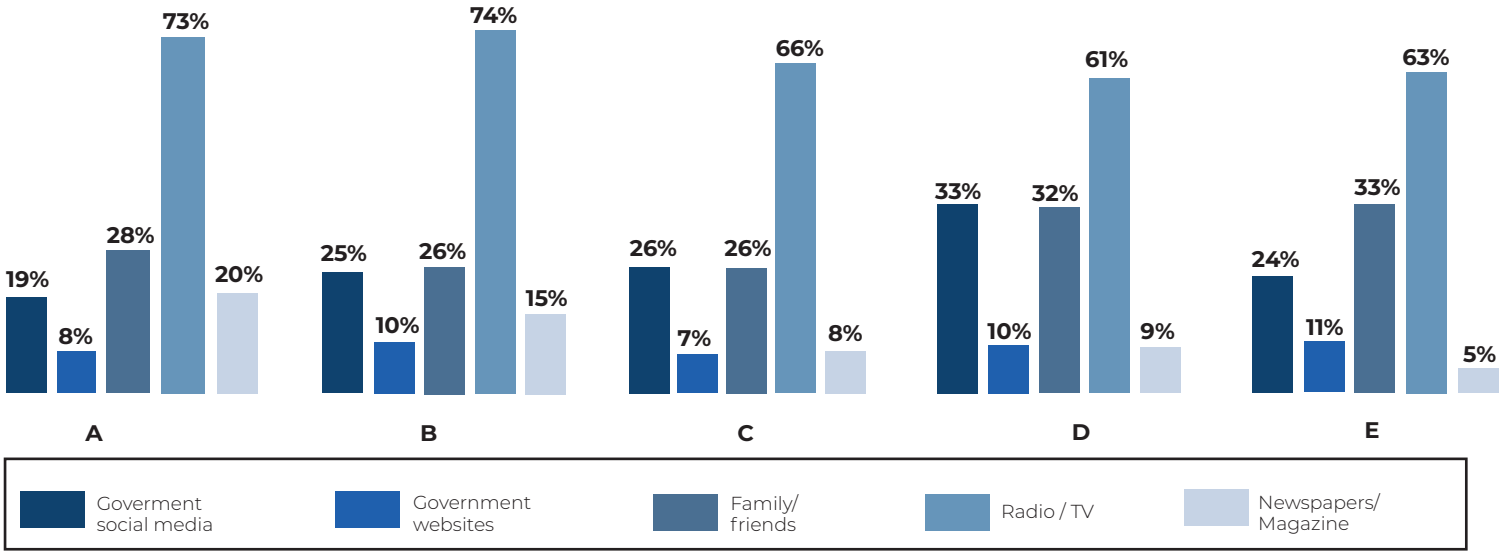
Another dimension explored is that of differences broken down by SEL, in order to analyze which information channels predominate at each level. Thus, in both countries, radio and television are the most preferred means of information for accessing relevant information on government aid at all SEL levels. Given that these aids are mainly for the lower SEL, it should be noted that E-level populations in Peru and Colombia indicated information from family and friends as their second choice **(see Figure 5).** Finally, government websites are not widely used in any of the SELs in the aforementioned countries, so it is essential to have adequate information channels that take into account the characteristics of the population to be reached.

Figure 5. Channels of information on government assistance during the pandemic, broken down by socioeconomic level—% of people



2. Knowledge of state support related to the health emergency

b. Colombia



Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people who stated that they were aware of the assistance provided by the Government in the context of a pandemic. The data correspond to the response to the following question: "Are you aware of any bonds/vouchers or any kind of assistance that has been provided by the government during the pandemic?"

Source: IEP Survey (2020). Authors.

3. Changes in internet use

The Internet is a valuable tool that has influenced various areas of daily life. With its rapid diffusion and expanded use, it has made it possible, for several years now, to obtain all kinds of information and to change the traditional ways of shopping, working, studying, interacting with other people, carrying out banking transactions, among other activities. Due to the COVID-19 pandemic and social confinement measures, the Internet has become an even more important service. Therefore, measures to boost digital transformation to minimize the negative repercussions of this crisis on, for example, employment and underemployment in certain jobs and sectors are needed (Savona, 2021).

Below, information is presented regarding the changes that have occurred in the use of the Internet in relation to various activities during the pandemic. **Figure 6** indicates that the largest increases have been recorded in relation to education and remote work activities. On the other hand, the results show that the highest percentages of activities that have never been used are those corresponding to government procedures and health. These results raise the following questions: what is the use of sophisticated platforms or digitized government entities if the majority of citizens do not take advantage of these services, and how can the public sector establish a more direct dialogue with citizens? In this context, ICT can be used to increase public sector efficiency, equality, equity and civic participation.[3]

Figure 6. Changes in internet usage during the pandemic, broken down by type of activity—% people

Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "Would you say that, compared to before the pandemic, your personal use of the internet for... has increased/has decreased/is the same/ I've never used it for that purpose."

Source: IEP Survey (2020). Authors.

[3] See https://bit.ly/2RgrFRZ (Last reviewed on April 21, 2021)

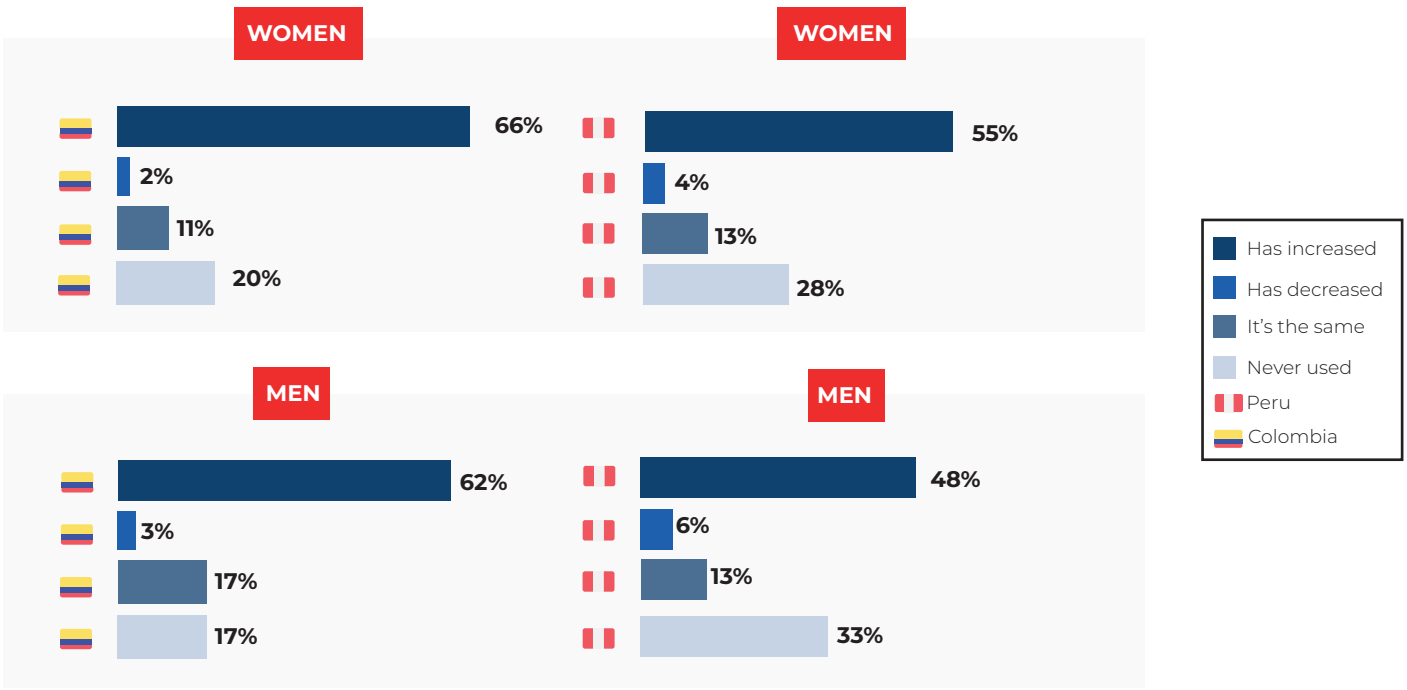
3. Changes in internet use

According to the figure above, one of the main changes in the use of the Internet as a result of the pandemic was in telework or remote work. However, it is important to note that even before this, there was a trend toward the digitalization of work in various modalities. For example, there are digital platforms through which affiliated freelancers can earn income by performing a set of specific tasks for different clients. However, as noted in ECLAC (2020), telework is not only a technology issue; a legal and regulatory framework that establishes labor guidelines, an organizational culture, labor rights, among others, is needed.

The survey results show that 58% and 79% of urban Peruvians and Colombians, respectively, have used the Internet to work remotely. In the case of women in Peru, 55% of them increased their use of the Internet to work remotely, but 28% have never used the Internet for this activity **(see Figure 7)**, while in the case of Colombia, 66% of women reported an increase in their use of the Internet to work, and 20% indicated that they had never used the Internet for this purpose.

In the analysis by age group **(see Figure 8),** it can be seen that the youngest respondents (18–25 years old) are the ones who have increased their use of the Internet to work from home in Peru, while in Colombia, it was people between 26 and 60 years old. Likewise, in the three age groups analyzed, the percentages are considerable in the category "Never used the Internet for this activity," especially among older adults (over 60).

Figure 7. Changes in the use of the Internet for remote work, broken down by gender—% of people

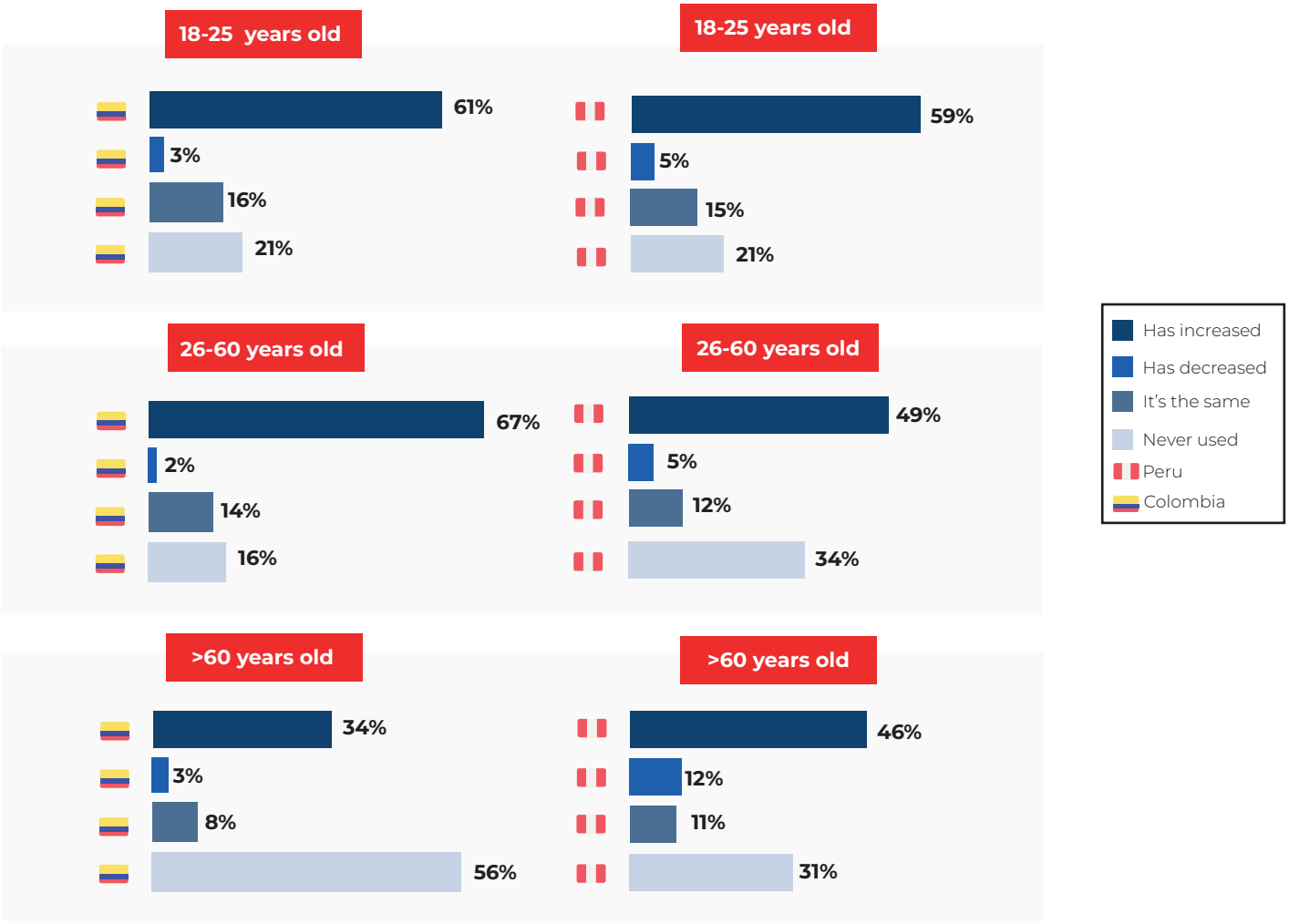


Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "Would you say that, compared to before the pandemic, your personal use of the Internet for telework/remote work (e.g., email, conferencing, virtual meetings, etc.) has increased/has decreased/is the same/I've never used it for that purpose."

Source: IEP Survey (2020). Authors.

3. Changes in internet use

Figure 8. Changes in the use of the Internet for remote work, broken down by age—% of people



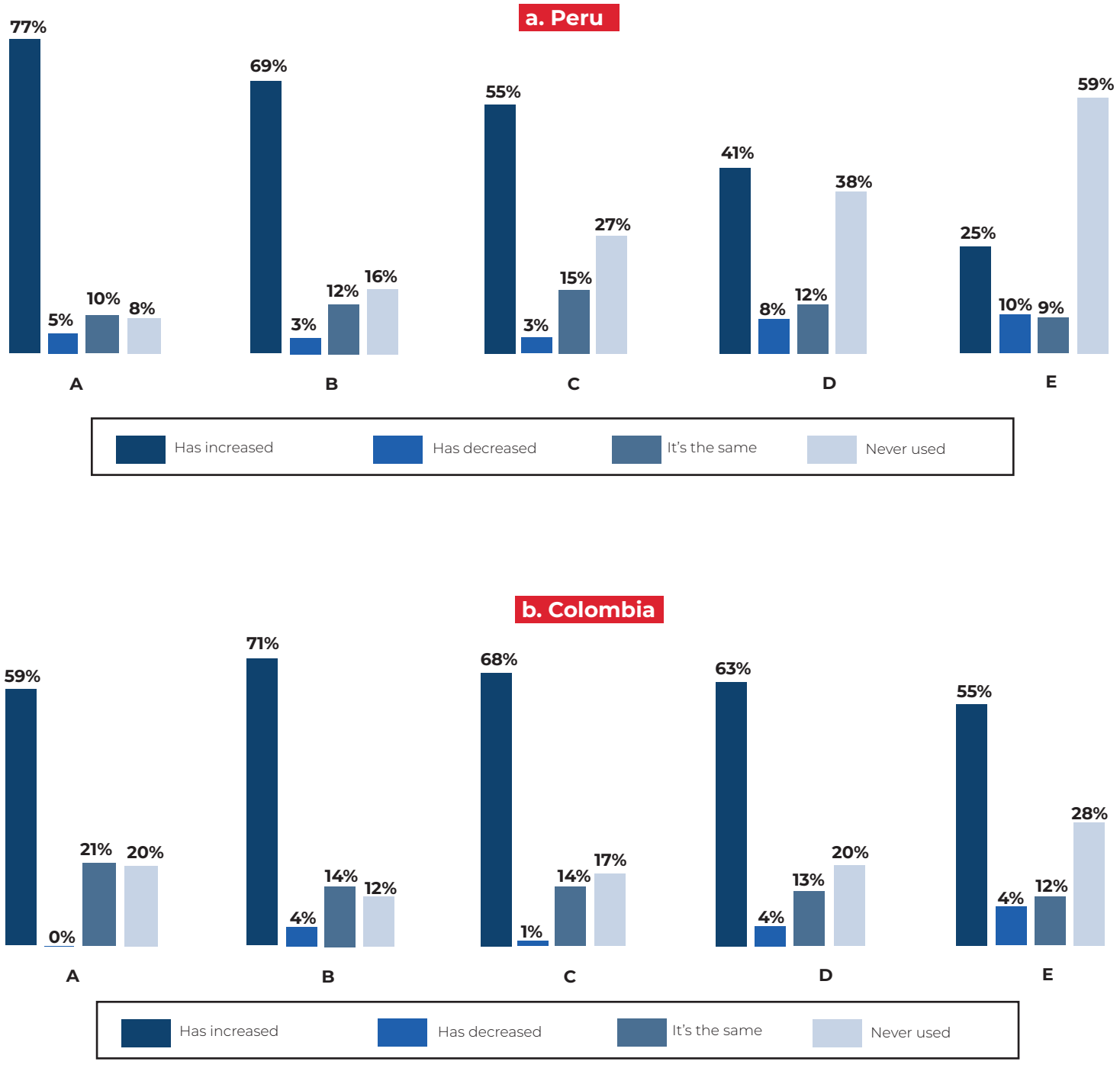
Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "Would you say that, compared to before the pandemic, your personal use of the Internet for telework/remote work (e.g., email, conferencing, virtual meetings, etc.) has increased/has decreased/is the same/I've never used it for that purpose."

Source: IEP Survey (2020). Authors.

Finally, two patterns are evident in terms of the differences among the SEL groups **(see Figure 9)**: (i) the higher the SEL, the greater the increase in the use of the Internet for remote work; (ii) the lower the SEL, the higher the percentage of those who have never used the Internet for remote work. These findings may be related to different aspects, including a lack of internet connection, digital skills, or the nature of the work performed. On a country level, the percentage of respondents that indicated their use of the Internet for remote work increased are higher in Colombia.

3. Changes in internet use

Figure 9. Changes in the use of the Internet for remote work, broken down by socioeconomic level—% of people



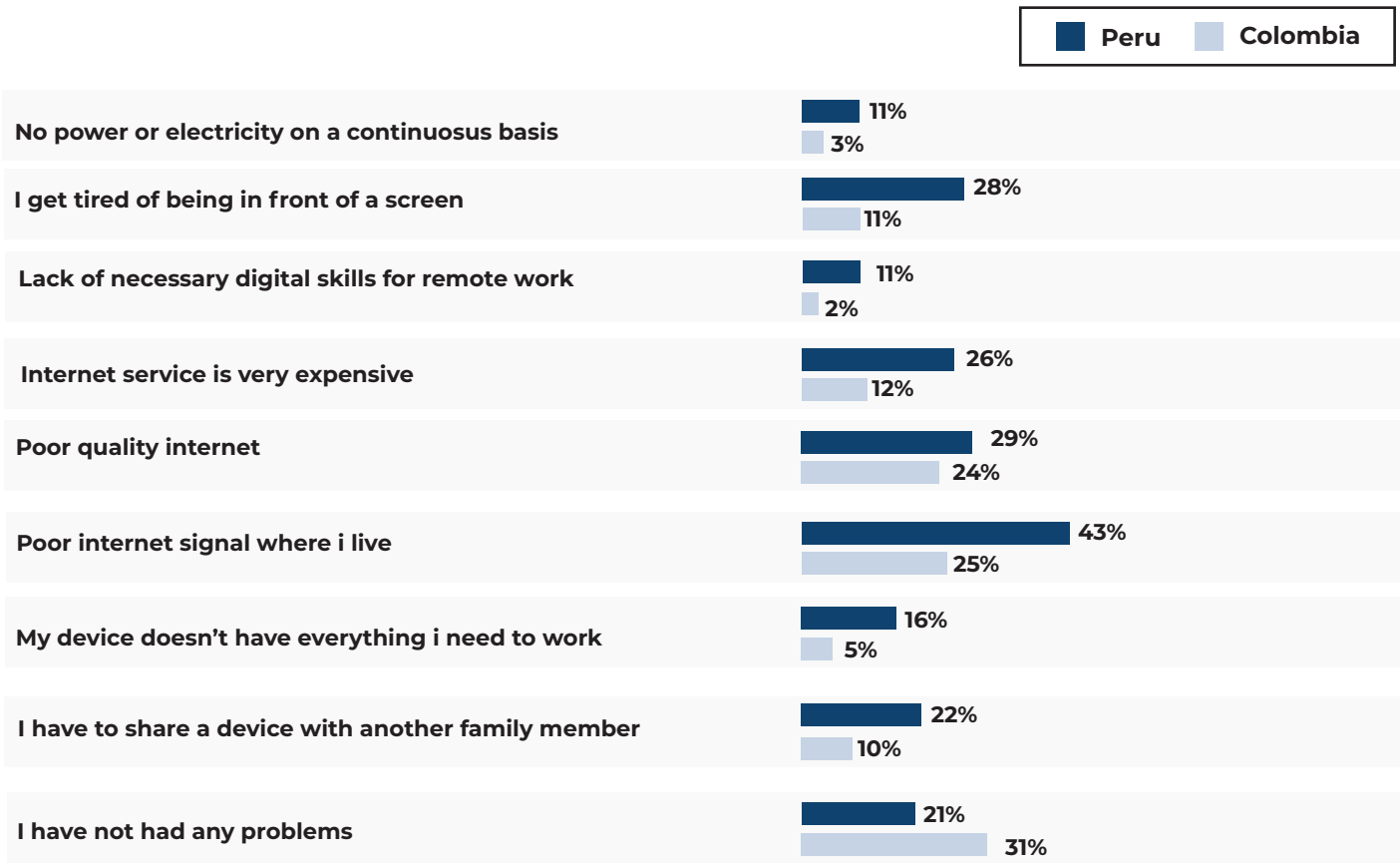
Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "Would you say that, compared to before the pandemic, your personal use of the Internet for telework/remote work (e.g., email, conferencing, virtual meetings, etc.) has increased/has decreased/is the same/I've never used it for that purpose."

Source: IEP Survey (2020). Authors.

3. Changes in internet use

Likewise, the *IEP survey (2020)* inquired about the difficulties for the development of work activities from the home. **Figure 10** shows that the main problem for teleworking in Peru and Colombia is the limited Internet coverage and its poor signal quality. As shown in **Table 4**, these results are similar among men and women, age groups, and socioeconomic levels, which shows that the problems of internet service quality are transversal to social and economic inequalities.

Figure 10. Main obstacles to remote work or teleworking—% of people



Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people who work remotely or telecommute (Peru = 653, Colombia = 792). The data correspond to the response to the following question: "What problems in working remotely or teleworking have you experienced?"

Source: IEP Survey (2020). Authors.

Table 4. Main obstacles to remote work or teleworking, broken down by social groups—% of people

	Peru		Colombia	
	Internet signal where I live is poor	ISP offers poor quality Internet	Internet signal where I live is poor	ISP offers poor quality Internet
Gender				
Women	**42%**	**30%**	**27%**	**24%**
Men	**43%**	**28%**	**22%**	**24%**
Age				
18-25	**36%**	**34%**	**19%**	**21%**
26-60	**46%**	**27%**	**27%**	**25%**
>60	**34%**	**20%**	**6%**	**18%**
Socioeconomic level				
A	**32%**	**32%**	**22%**	**28%**
B	**33%**	**24%**	**29%**	**23%**
C	**39%**	**31%**	**23%**	**24%**
D	**55%**	**29%**	**23%**	**22%**
E	**69%**	**28%**	**28%**	**28%**

Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the table corresponds to the total number of people working remotely or teleworking. (Peru = 653, Colombia = 792). The data correspond to the response to the following question: "What types of problems have you experienced working remotely or teleworking?"

Source: IEP Survey (2020). Authors.

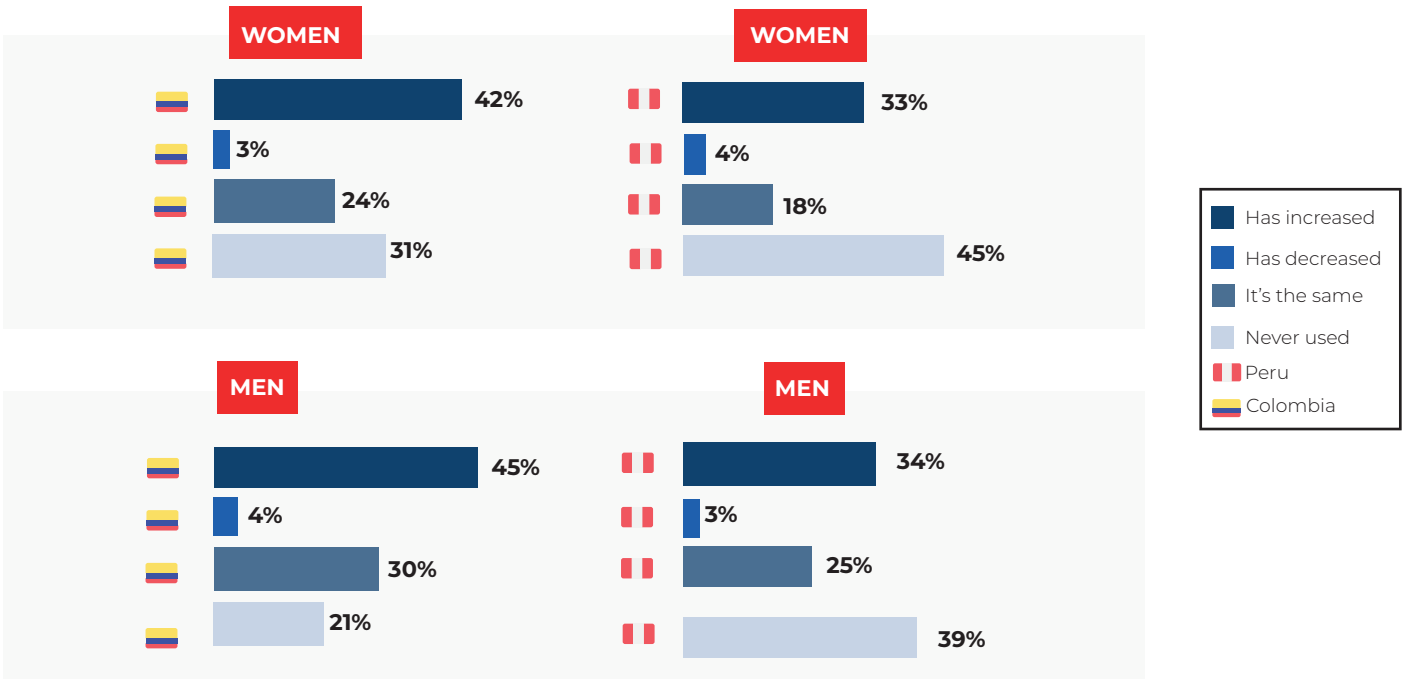
Online financial transactions are another issue that has gained importance during the pandemic (ECLAC, 2020). ICT facilitate the reduction of transaction costs, the availability of different payment mechanisms, the expansion of the scope of financial services, and the increase of financial knowledge (especially among the population of young adults).[4]

In this context, 33% and 43% of people in Peru and Colombia, respectively, reported a higher use of the Internet to conduct banking or financial transactions, but it should be noted that 42% and 26%, respectively, indicated that they have never used the Internet for that purpose. If the responses are broken down by gender, **Figure 11** shows that women, to a greater extent than men, said they have never used the Internet for banking or financial transactions. Similarly, older age groups also show disadvantages in this regard **(see Figure 12)**. Finally, differences by SEL are evident: the lower the SEL, the higher the percentage of those who have never used the Internet for this purpose **(see Figure 13)**.

[4] Based on previous research, it is known that credit and debit card possession in the Global South is low. In 2017, only 25% of the population in Peru reported having one of these cards; additionally, the use of cell phones for financial transactions barely reaches 5%. See: https://bit.ly/3obMN87

3. Changes in internet use

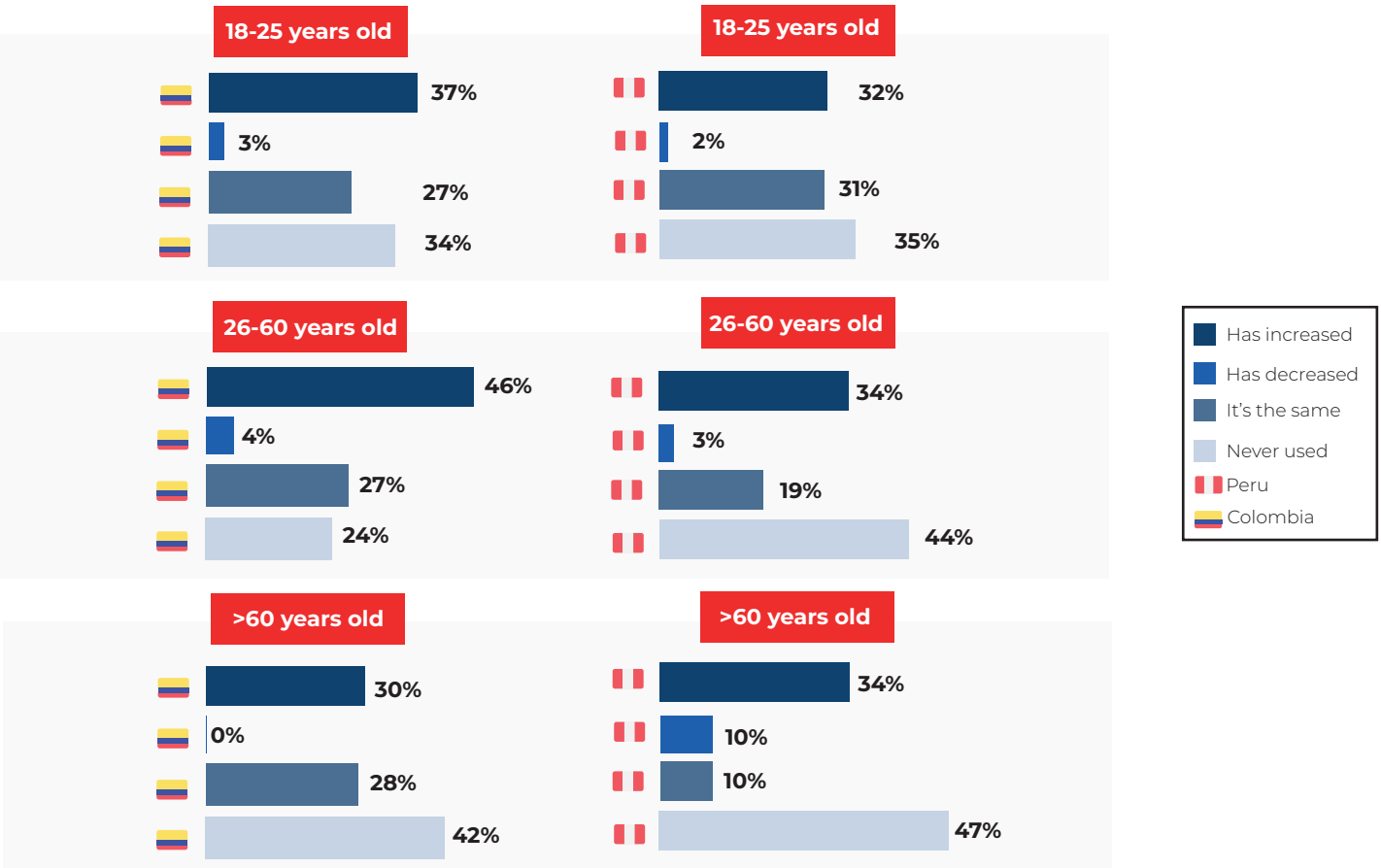
Figure 11. Changes in the use of the Internet for banking or financial transactions, broken down by gender—% of people



Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "Would you say that, compared to before the pandemic, your personal use of the internet for banking or financial transactions, e.g., internet banking or mobile banking has increased/has decreased/is the same/I've never used it for that purpose?"

Source: IEP Survey (2020). Authors.

Figure 12. Changes in the use of the Internet for banking or financial transactions, b roken down by age—% of people

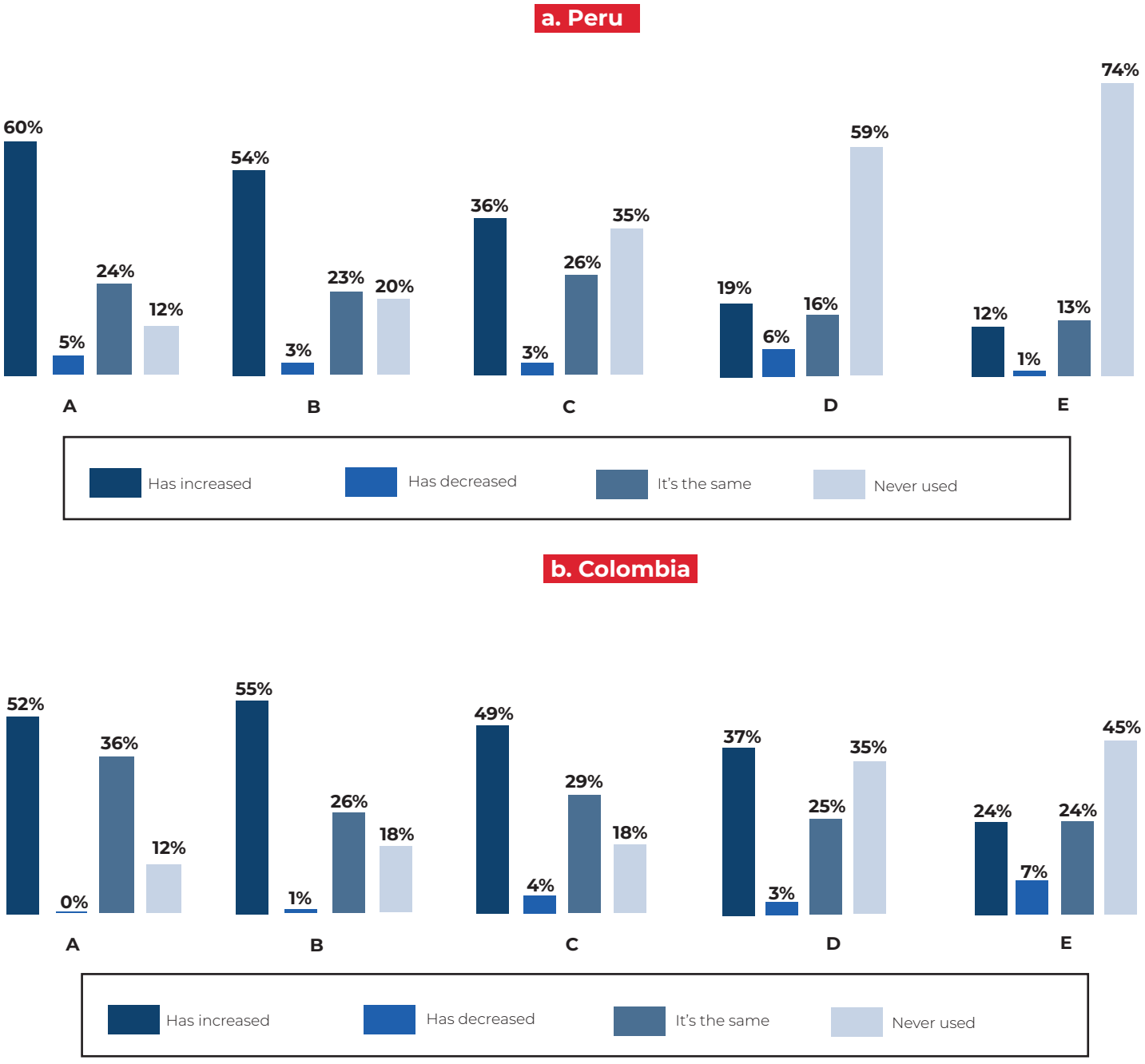


Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "Would you say that, compared to before the pandemic, your personal use of the internet for banking or financial transactions, e.g., internet banking or mobile banking has increased/has decreased/is the same/I've never used it for that purpose?"

Source: IEP Survey (2020). Authors.

3. Changes in internet use

Figure 13. Changes in the use of the Internet for banking or financial transactions, broken down by socioeconomic level —% of people



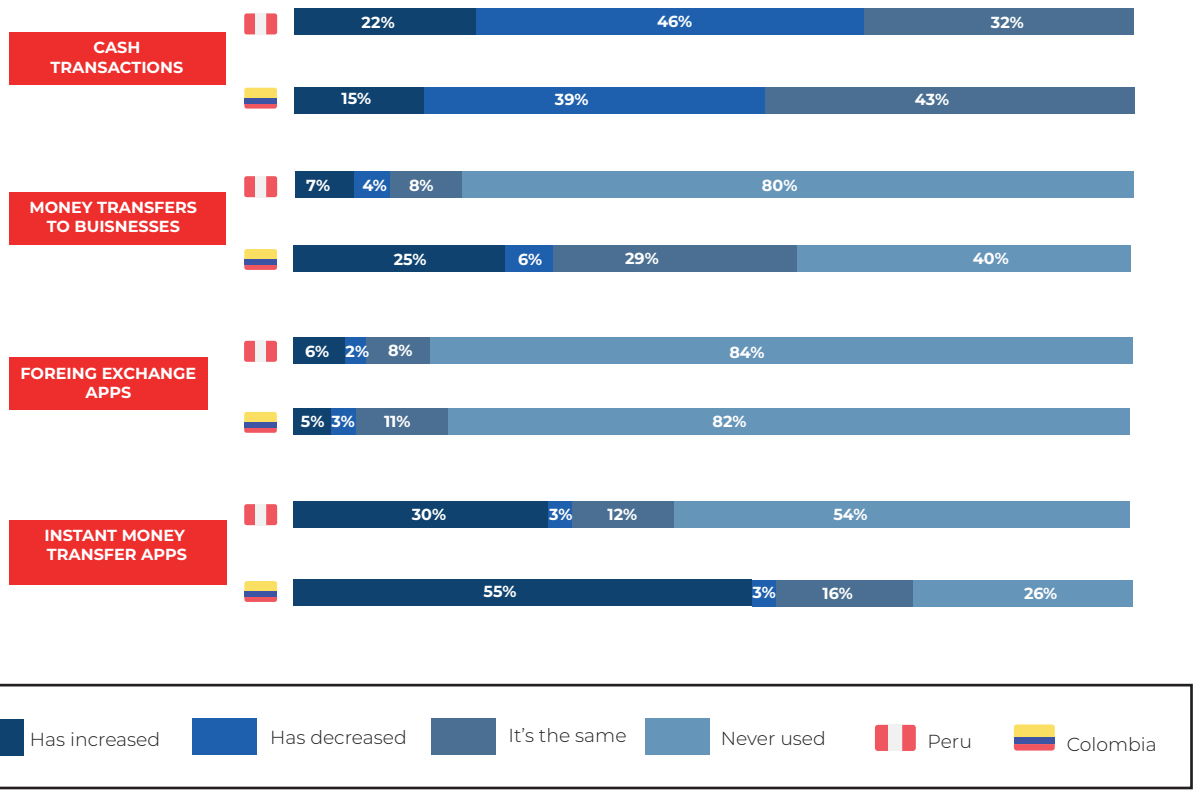
Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "Would you say that, compared to before the pandemic, your personal use of the internet for banking or financial transactions, e.g., internet banking or mobile banking has increased/has decreased/is the same/I've never used it for that purpose?"

Source: IEP Survey (2020). Authors.

3. Changes in internet use

The survey also inquired about changes in the use of financial transactions based on the type of mobile applications used. Thus, **Figure 14** indicates that the percentage of people who have never used applications for financial transactions is alarming, especially in Peru, where one out of every two people has never used a mobile application to transfer money instantly. Similarly, it is important to note the lag in the use of applications for foreign exchange transactions: in Peru and Colombia, 80% of people have never used an application for this purpose. Finally, the results of the *IEP survey (2020)* show that 43% of people on average in both countries reported a decrease in the use of cash in this period, indicating that the COVID-19 pandemic has led people to use alternative means of payment in lieu of cash.

Figure 14. Changes in the use of apps for financial transactions—% of people



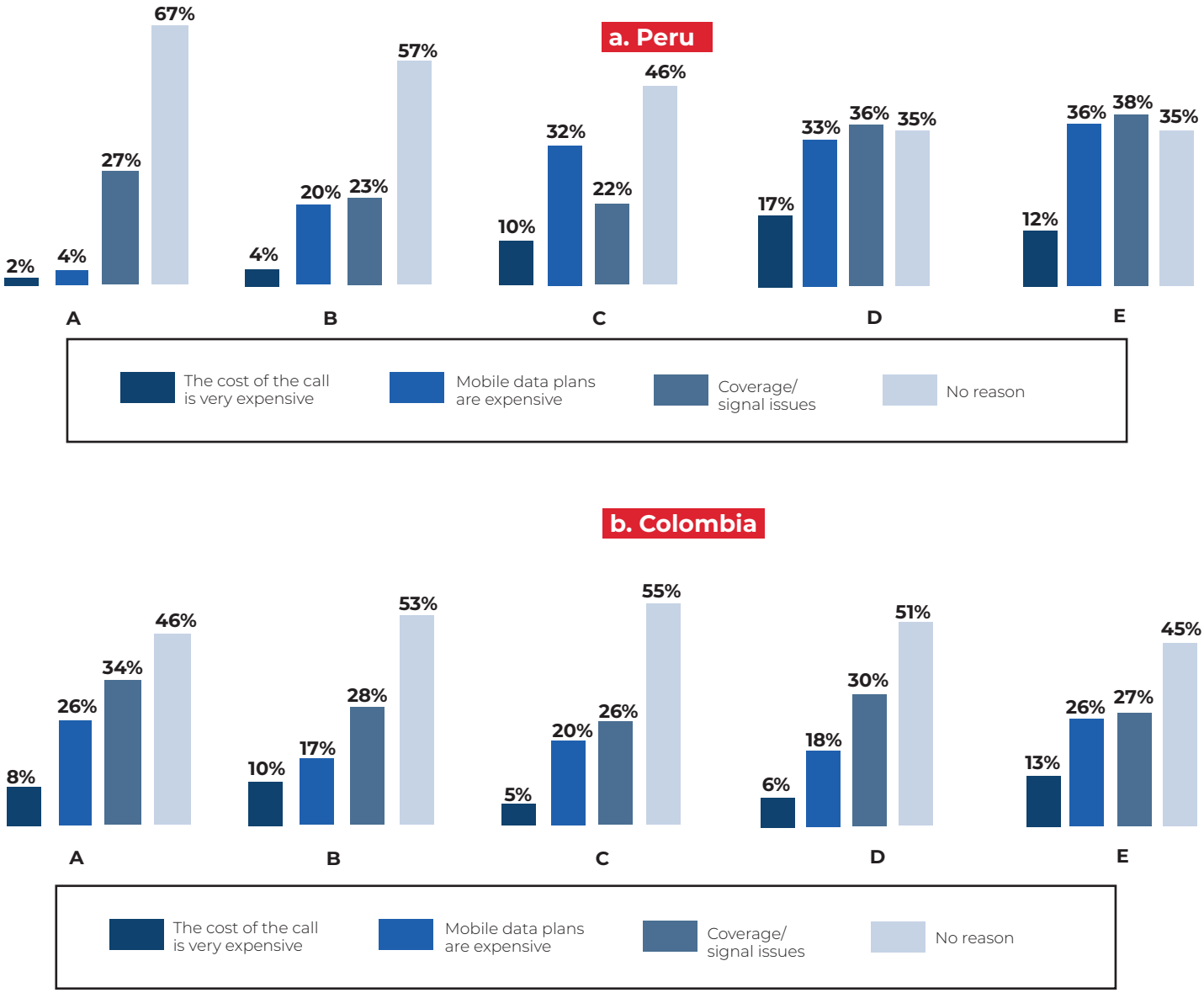
Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that have used the Internet is the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: "In recent months, would you say that your use of...? has increased/has decreased/is the same/I've never used it for that purpose."

Source: IEP Survey (2020). Authors.

4. Barriers to ICT use

The main challenges regarding ICT use in the context of the COVID-19 pandemic are also analyzed in the *IEP survey (2020)*. In particular, it analyzes the main barriers that people face to increase their use of cell phones and the Internet in Peru and Colombia. **Figure 15** shows that the main reason people don't use their cell phones more is associated with the quality of service: coverage and signal problems are barriers faced by everyone, regardless of their socioeconomic level. On the other hand, **Figure 15** shows evidence of the affordability problem in lower socioeconomic groups. The cost of calls and Internet data (the latter is relatively more important) is a major barrier for the lower socioeconomic levels, in contrast to the higher ones.

Figure 15. Main reasons for not using cell phones more, broken down by socioeconomic level —% of people

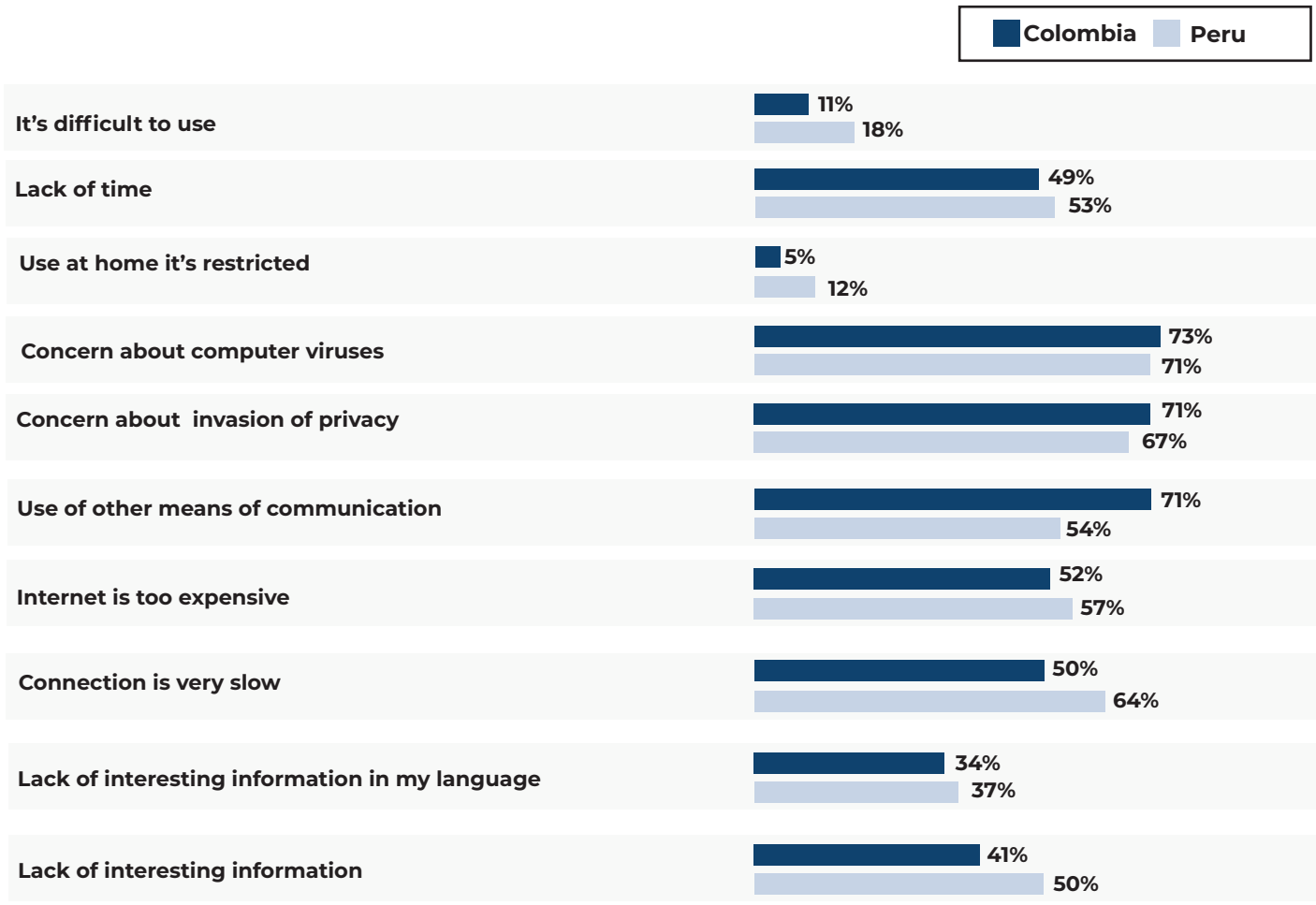


Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people that use cell phones (Peru = 973, Colombia = 987). The data correspond to the response to the following question: "Why don't you use your cell phone more?"

Source: IEP Survey (2020). Authors.

Similarly, **Figure 16** shows the main reasons people cited for not using the Internet more. The main barrier is associated with security and privacy issues: seven out of ten people in Colombia and Peru indicate that concerns about software viruses and online privacy are the main reasons they do not use the Internet more. On the other hand, it is important to mention that the differences between the countries analyzed in terms of the reasons that keep them from using the Internet more are mainly tied to the quality and cost of the service. In Peru, 64% cited the slow connection as a reason, and 57% said the high cost; in Colombia, 50% and 52% say that these two reasons are the main barriers to increasing their internet use.

Figure 16. Main reasons for not using the Internet more—% of people



Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The total number of observations reported in the figure corresponds to the total number of people who have used the Internet in the last three months (Peru = 882, Colombia = 976). The data correspond to the response to the following question: What are the main reasons you don't use the Internet more?".

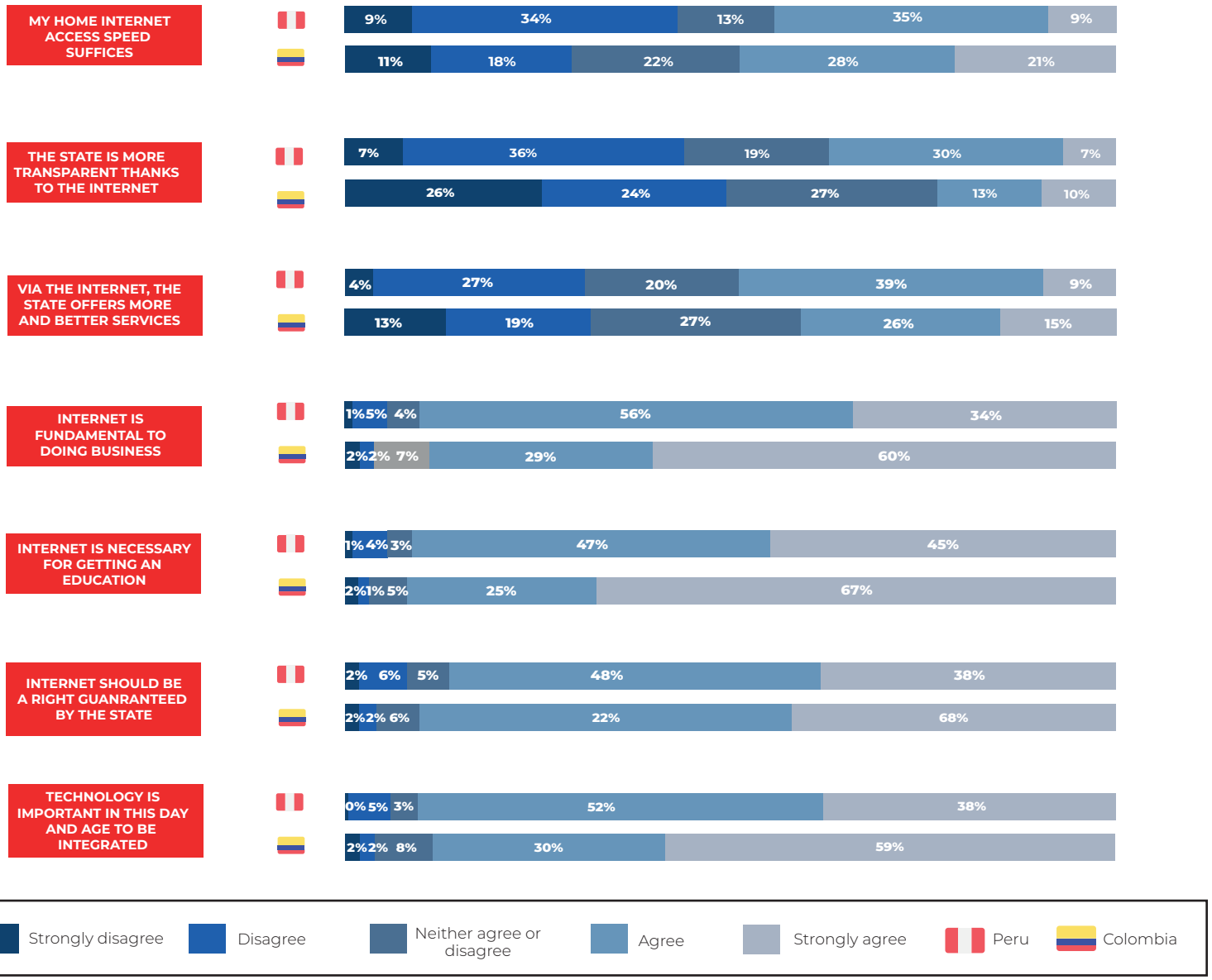
Source: IEP Survey (2020). Authors.

5. Attitudes toward the Internet

The *IEP survey (2020)* makes it possible to evaluate the population's perceptions regarding the importance of the Internet **(see Figure 17)**. The results highlight high rates of dissatisfaction with the role of the State in the provision and use of the Internet.

The capacity of the State to offer better public services and its level of transparency demonstrated one are highly criticized by people in Peru and Colombia. Likewise, Figure 17 shows the level of importance that the population assigns to internet service: 9 out of 10 people in Colombia and Peru believe that the Internet is fundamental for doing business and is a necessity for education. Finally, it is interesting to note attitudes regarding the Internet as a citizen's right. The survey results indicate that 90% of people in Peru and Colombia agree that internet service should be a right guaranteed by the State.

Figure 17. Attitudes toward the Internet—% of people



Note: Total number of respondents in Peru = 1002 and Colombia = 1000. The number of observations reported in the figure corresponds to the total sample. The data corresponds to the response to the following question: On a 5-point scale, where 1 means Strongly Disagree and 5 means Strongly Agree, can you indicate how strongly you agree or disagree with the following statements?"

Source: IEP Survey (2020). Authors.

6. Balance

The health crisis generated by the spread of the COVID-19 virus has highlighted the importance of access to and use of Information and Communication Technologies (ICT), given that they have been fundamental elements during confinement for people to continue working, studying, acquiring food, obtaining information of various kinds, maintaining communication with family and friends, conducting banking transactions, reactivating the economy, among others. Therefore, it is important to start developing studies that analyze the main changes generated by the COVID-19 pandemic and identify the most vulnerable social groups, so that public policy design can be improved.

One of the objectives of this document is to show the contrast between Peru and Colombia in the various aspects of ICT access and use. Thus, it has been observed that access to devices for personal use (i.e., smartphones, laptops and tablets) is higher in Colombia than Peru. Likewise, internet use (in the last three months) is higher in Colombia than Peru.

Regarding the type of internet access, it is found that in Colombia there is a predominance (more than 80%) of home internet access, while in Peru (58%) the Internet is accessed mainly through mobile data. As mentioned above, the usage experience, as well as the activities that can be developed online, will depend, to a large extent, on the type of connection. Furthermore, in Colombia, only 2% of respondents reported not having internet at home, while this figure is 14% for Peru. In addition, with regard to the various internet uses (health, education, work, entertainment, buying and selling, etc.), it is observed that, compared to Colombia, the percentages corresponding to not having used the Internet for these activities are higher in Peru.

Other results can be divided into five aspects:
First, the indicators of ICT device ownership indicate that the percentage of people who own smartphones has almost reached mass levels in urban areas of Peru and Colombia.

Secondly, the survey results show that the most preferred means of information for accessing relevant information on government assistance during the COVID-19 pandemic corresponds to traditional media, such as radio or television, compared to new technologies (social media and government websites). Moreover, this result is transversal to all socioeconomic levels, while younger people indicated a clear preference for new technologies.

Thirdly, the pandemic has highlighted the importance of technologies in people's daily lives. The survey results show that work (teleworking or remote work) and education were the activities that showed the highest increase in Internet use during the COVID-19 pandemic. Similarly, the main problem for teleworking in Peru and Colombia is the limited internet signal and its poor quality, while the use of the Internet for financial transactions is far from international trends, especially in Peru, where 50% of people have never used a mobile application to transfer money instantly.

Finally, the survey delved into the main barriers to increasing the use of cell phones and the Internet. The results show that, in addition to the low affordability for people with lower economic resources, the poor signal quality and coverage of these services are problems that affect all people, regardless of their socioeconomic level. Finally, the relative importance that the population assigns to the Internet in their lives is highlighted, as they recognize its relevance for business and education, but, at the same time, they criticize the State's level of online transparency and the quality of the services offered via the Internet.

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