

Trusting communication of the pandemic: the perceptions of Spanish citizens regarding government information on Covid-19

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Abstract

There is global concern regarding how the Covid-19 pandemic was communicated to citizens, given the enormous amount of uncertainty and misinformation surrounding the health situation (Singh *et al.*, 2020). As expected, the government has been the main source of official information in most countries, but the crisis has also affected political communication models and the management of crisis communication and misinformation. In this scenario, the level of trust in the government and political polarization have become crucial variables to understand how citizens perceive and receive communicate about the effects of the pandemic in their daily life. To address these issues in the case of Spain, in November 2020 we conducted the first nationally representative survey to analyze the level of trust that citizens have in public information on Covid-19 provided by the national government. The findings reveal that their perceptions regarding the quality of such information, the media used for its transmission, and the communication management by the Government during the pandemic were rather negative, although some sociodemographic differences are observed. This study, besides broadening knowledge about government communication during the pandemic in Spain, opens new questions such as the effect of trust in government communication on the level of compliance and agreement with health measures.

Keywords

Covid-19; Pandemics; Infodemics; Political communication; Health information; Health communication; Trust; Polarization; Disinformation; Citizens; Government.

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1. Introduction

Surveys conducted during the first wave of Covid-19 showed that Spanish citizens did not trust the management of the crisis by the government. According to the *Centro de Investigaciones Sociológicas*, almost half of the Spanish population (47.8%) had little or no trust in government policies to fight the pandemic, while 54.5% of citizens stated that they would like more information about the pandemic (CIS, 2020). This type of information is essential to study government communication during the crisis, but insufficient studies have focused on this aspect of the pandemic, which is key because of its influence on the effectiveness of the measures implemented, as emphasized by the *World Health Organization*, which considers risk communication to be an essential weapon to tackle health emergencies (WHO, n.d.).

The relevance of studying communication in this context is based on its potential effects on affective polarization, one of the most concerning current issues in political communication. This is particularly problematic during a crisis and more so in a context in which information failures, such as misinformation and disinformation (Wardle; Derakhshan, 2017), make crisis communication more difficult and less effective. In particular, disinformation has doubtless played a relevant role during the Covid-19 health crisis (Singh et al., 2020)

Works by Moreno, Fuentes-Lara, and Navarro (2020) and Losada-Díaz, Rodríguez-Fernández, and Paniagua-Rojano (2020) have already dealt with citizen opinions regarding government communication during the pandemic, albeit during the first wave of the crisis. The aim of the current study is thus to complement this type of approach with later fieldwork to identify citizens' perceptions with more perspective after the first wave and following the deescalation measures adopted during the summer of 2020. The present work also considers the potential for differences based on sociodemographic characteristics, which could help institutions develop more effective and accurate communication plans for future crises. Moreover, it also specifically addresses differences based on political ideology and polarization, one of the most relevant divisions in contemporary society. Furthermore, we present the first nationally representative survey on this topic, making its observations more statistically relevant than previous works.

Our main objective is thus to determine the perceptions of Spanish citizens about the communication management of the government during the Covid-19 crisis and to understand the effect of different factors on their level of trust in such communication. The remainder of this manuscript thus presents a theoretical justification of the research questions and objectives, the results of the representative survey, and a discussion of the results.

2. From trust to polarization

The incorporation of risk into people's decisions can be considered based on the concept of trust. Indeed, situations involving the trust factor involve the assumption of risk by someone depending on the performance of another (Coleman, 1994). This requires a commitment from the part of those involved, who assume a certain risk in a situation where success cannot be guaranteed (Nooteboom, 2003). However, the decision to avoid taking a certain risk also means renouncing the associated advantages (Luhmann, 2000). Therefore, for citizens to decide to take certain risks, they must be sure that the benefits are actually worth it. In such decisions, trust facilitates information exchange and faster adaptation to the environment, contributing positively to cooperation (Qianhong, 2004).

However, during a global crisis such as that associated with Covid-19, social solidarity and trust may be destroyed by the emergence of ideologically extreme positions (Hanitzsch; Van-Dalen; Steindl, 2018), which is clearly related to the current surge of polarization in society.

Trust is related to the routine, normal behaviors of people (Luhmann, 2000), so the emergence of a health crisis acts as a disruptive element that can modify their behaviors and everyday life, thereby affecting their levels of trust in the public institutions responsible for making important political decisions. A risk that goes beyond citizens' personal circle thus becomes an institutional risk, affecting the social capital of society. According to Quianhong (2004), the stability of a society then depends on the trust of the people who build it.

Social capital in relationships with strangers, i.e., those beyond one's close/personal circle, is established based on trust, implying a rational calculation and an evaluation of interests between the parties involved. Based on the cost/benefit concept embedded in the universalist ethics of personal responsibility, all parties must comply with their assumed commitments (Torche; Valenzuela, 2011). Campbell (2004), influenced by culturalist literature, emphasizes that social capital is a democratic value that is built on everyday social traditions and that accumulates through participation in

networks of civic engagement. Through its role as an intermediary, social capital can establish and contribute to the efficiency of democracy by instilling the principles of democratic political culture and avoiding polarization as well as self-serving political decisions in an extreme situation such as the Covid-19 pandemic:

“Well-functioning political institutions can foster trust and social norms that in turn can facilitate cooperation, and with what we call high ‘collective action capital,’ states have a wider range of tools in their policy toolbox than just restrictions [...]. This is important when some behaviours are extremely hard to regulate or monitor” (Harring; Jagers; Löfgren, 2021, p. 3).

2.1. Trusting the government

Slightly more than half of the world’s population (52%) trusted the management of their government (Edelman, 2019) before the health crisis. However, this percentage drops to 40% for Spain. Torcal (2014) suggests that this mistrust depends on the negative perception of the political responsiveness of representative institutions, aggravated by an increasing perception of political corruption. This did not provide a strong foundation when the Covid-19 pandemic struck and began to determine the public policies of all governments around the world, including that of Spain. Although there were indications of a possible viral pandemic as early as December 2019, it was not until 30 January 2020 that the *World Health Organization* declared a public health emergency of international concern. In Spain, *Royal decree 463/2020*, passed on March 14, officially declared a state of alarm to control the Covid-19 pandemic.

Despite the implementation of draconian measures during this state of alarm, many countries suffer from what Khod-yakov (2007) defined as the paradox of “the weakness of the strong state” in his analysis of the former Soviet Union. The fact that states show greater decision-making and action capacity means that the daily activities and freedoms of citizens depend on and are affected by these. In their search for a solution to the current health and social crises, the weaknesses of governments became apparent due to their inability to make, communicate, and properly implement decisions.

Under the clientelist political communication model fueled by the current pandemic, Donsbach, Rentsch, and Mende (2012) suggest that Spanish society needs a communicational structure in which perceptions of reality, values, demands, and opinions can be validly and credibly communicated between individuals, groups, and the government. In particular, as concluded by Lim *et al.* in their study carried out during the pandemic in Singapore, this is because

“trust in government communication on Covid-19 influences the risk-avoiding behaviour of the public” (Lim *et al.*, 2020, p. 98).

Against this background, the main goal of this study is to determine the level of trust of Spanish citizens in their government’s ability regarding the handling and communication of the pandemic. This is relevant because, according to observations from the *Standard Eurobarometer 93.1* published by the *European Commission* in 2020, in countries where such trust is high, governments have more political options because they know that their decisions will be respected by most citizens. It thus becomes important to reduce the communication gap between citizens and the government.

According to Esser and Pfetsch (2020), political communication is ambivalent in changing democracies with hybrid media. Transparent, diverse, and participatory information is possible in favorable circumstances, whereas unfavorable circumstances benefit authoritarian parties and leaders. Based on these arguments, it is not unreasonable to suggest that, in the current situation of instability in Spain, which is deeply determined by the Covid-19 crisis, citizens perceive that the government is not acting in their favor, distrusting its ability to address their needs and demands.

In this context, to understand the trust of Spanish citizens in the communication of the pandemic by the Government, we pose the following research question (RQ):

RQ1. What is the perception of Spanish citizens regarding the communication of the Covid-19 pandemic by the government?

2.2. Factors affecting trust

In a “twitch environment,” in which the health and social crises associated with Covid-19 have revealed the weaknesses of a Spanish society still recovering from the aftermath of the 2008 economic crisis, the phenomena of fragmentation and polarization have facilitated social disaffection with political leaders, who are adopting increasingly “aggressive” measures in a search for greater impact. Mihelj and Jiménez-Martínez (2020) highlight that this phenomenon has become more acute and widespread in the online environment, leading to an unprecedented fragmentation of the public sphere and an increase in “filter bubbles” or “echo chambers” in which people are only exposed to material with which they agree. This reinforces personal beliefs and ideologies rather than exposing audiences to unfamiliar ideas (Pariser, 2011; Waisbord, 2014).

“According to the *Centro de Investigaciones Sociológicas*, almost half of the Spanish population (47.8%) had little or no trust in government policies to fight the pandemic, while 54.5% of citizens stated that they would like more information about the pandemic”

In such circumstances, we consider that social trust in government should be measured as a “transition phenomenon” (Tao *et al.*, 2014) that is deeply determined by the current context and circumstances. In fact, citizen trust depends on many interacting sociodemographic factors. According to the *Global behaviors and perceptions in the covid-19 pandemic* dataset (OSF, n.d.), while older and healthier people trust their governments more, young and well-educated citizens are more distrustful. The individual characteristics of citizens are also determined by the robustness of governments, economic development, levels of globalization, institutional quality, and press freedom.

“Affective polarization is one of the most concerning current issues in political communication. This is particularly problematic during a crisis and more so in a context in which information failures, such as misinformation and disinformation, make crisis communication more difficult and less effective”

The great relevance of the sociodemographic characteristics of citizens can also be seen in how they affect the type of media they consume, as repeatedly shown by the *Estudio general de medios* and other statistics and studies. In a context in which digital communication has emerged as the most important channel throughout the Covid-19 pandemic, its differing relevance depending on factors such as gender, age, education level, or place of residence becomes more important. One can therefore ask:

RQ2. How do gender, age, education, and region of residence influence trust in the Spanish government?

2.3. Political polarization and trust

Note that official sources such as the government are still identified as credible in Spain. Moreover, because of the magnitude of this crisis and because it is related to health, citizens still trust the official discourse and the work of institutions (Losada-Díaz; Rodríguez-Fernández; Paniagua-Rojano, 2020). However, the pandemic arrived in a context of decreasing trust owing to what has been called “affective polarization” (Hetherington; Nelson, 2003). Garrido-Rubia, Martínez-Rodríguez, and Mora-Rodríguez state that

“this is an especially relevant issue, especially in the context of this health crisis, since the increase in affective polarization implies the difficulty of generating consensus on the most appropriate policies to solve a problem” (Garrido-Rubia; Martínez-Rodríguez; Mora-Rodríguez, 2020, p. 543).

In Spain, a direct consequence of the low level of citizen trust in the government and the strong political polarization (increased by the effects of the pandemic) is the weakening of state attempts to maintain a dominant version of national identity and its potential capacity to build alternative versions of national identity (Mihelj; Jiménez-Martínez, 2020).

Moreover, the “soap-ification of the debate about government and the public good” (Brants *et al.*, 2010) finally leads to distrust from citizens regarding most aspects of public opinion. This problem is serious because trust provides the basis for all relationships (Giddens, 1990). Political polarization in Spain, driven by the populist phenomenon, considers politics as pure antagonism while rejecting the possibility of consensus. This tends to be reinforced and spread by social media algorithms through the sophisticated global phenomenon of disinformation (Waisbord, 2020). The role of disinformation in the Covid-19 pandemic in Spain is reflected by the fact that almost all respondents to the survey performed by Losada-Díaz, Rodríguez-Fernández, and Paniagua-Rojano (2020) during the first phase of the pandemic claimed to have received fake news.

In this time of social and health crises, populist communication can spread easily because of its direct effect on the negativity, emotionality, and sociability of citizens (Ernst *et al.*, 2019). These populist styles can be used to “package” the division between the people and elite in a more credible and attractive way, i.e., the central argument of “us and them” (Hameleers *et al.*, 2020). A clear effect in Spain during the rapid spread of Covid-19 was the “blame game” regarding political responsibility, where each political force tried to build its own framing and communication strategy (Garrido-Rubia; Martínez-Rodríguez; Mora-Rodríguez, 2020).

Against this background, the following two hypotheses can be established:

- H1. The political ideology of citizens correlates with their trust in the Spanish government in the context of Covid-19.
- H2. Higher levels of polarization correlate with lower levels of trust in the Spanish government in the context of Covid-19.

4. Method

To answer these research questions, a survey was conducted among Spanish citizens in November 2020, when the number of daily cases peaked during the second wave in Spain. This situation enables us to study government communication not only during the first wave of the pandemic during Spring 2020, the most difficult moment in Spain with one of the strictest lockdowns in the world, but also during summer, when restrictions were eased, and autumn, when the second wave hit, confirming that the pandemic was a long-term effect. The survey was representative having the minimum adequate sample size ($N = 400$) at the 95% confidence level, with an error margin of 0.5 and $p.q. = 50-50$. Subjects were selected by multistage sampling based on random digit dialing (RDD) to mobile phones in Spain with regional stratification.

4.1. Sample and procedure

The sample distribution followed quota sampling based on autonomous communities to replicate the distribution of Spanish population according to the *Spanish National Institute of Statistics (INE, 2021)*; Table 1 presents the regional distribution of the sample.

The final sample comprised 201 women (50.2%), 198 men (49.5%) and 1 person who did not fit these categories (0.3%), while the age of the respondents ranged from 14 to 82 years, with an average of 46.52 years (SD = 14.769 years). Both of these figures are close to the distribution of the Spanish population as reported by the *Spanish National Institute of Statistics (INE, 2021)*, with 49.01% of the Spanish population being male with an average age of 43.81 years. The respondents considered themselves to be slightly on the Left of the political spectrum ($M = 4.86$, $SD = 1.775$). Regarding education, 36.8% (147 people) were university undergraduates; Table 2 presents a more detailed distribution of the educational level of the respondents.

4.2. Measures

The survey first included sociodemographic questions on gender, age, autonomous community of residence, educational level, and political ideology (measured from 1 for extreme Left to 10 for extreme Right). Besides, the evaluation of government communication during the pandemic was measured by asking about the level of agreement (from 1 for totally disagree to 5 for totally agree) with the following seven statements:

- 1) The published data are correct.
- 2) The government has provided information about the current pandemic on time.
- 3) The government is doing a good job of informing about pandemic prevention via different media.
- 4) A feeling of security has been conveyed in government press conferences about the pandemic.
- 5) Politicians have conveyed more security when informing about statistics.
- 6) Experts have conveyed more security when informing about statistics.
- 7) Information has been provided in a timely, clear, comprehensible, and precise way.

These statements were then combined into an *indicator of the communication management of the government during the pandemic* using exploratory factor analysis (EFA) to confirm its validity (explained variance 65.99%, Kaiser-Meyer-Olkin (KMO) 0.930, Bartlett's sphericity test $\chi^2(21) = 1693.721$, $p < 0.001$). The Cronbach alpha value of $\alpha = 0.911$ confirmed that this indicator is reliable and robust. Following the same procedure, two more indicators were created to obtain clearer and more specific results: an *indicator of the quality of information* using statements 1, 2, and 7 ($\alpha = 0.868$), and an *indicator of the quality of the media used for the transmission of information* using statements 3 and 4 ($\alpha = 0.817$).

4.3. Analysis

All answers were anonymized and loaded into *IBM SPSS* software, then the mentioned indicators were constructed. To avoid inconsistencies, the data were subject to exploratory analysis with observation of the graphical distribution of the frequencies. The main results of this study were obtained using bivariate correlations, Student's *t*-tests for independent

Table 1. Regional distribution of the sample

Autonomous community	Frequency	Percentage
Andalusia	72	18.00
Catalonia	65	16.25
Madrid	57	14.25
Valencian Community	43	10.75
Galicia	23	5.75
Castille and Leon	20	5.00
Canary Islands	17	4.25
Basque Country	19	4.75
Castille-La Mancha	17	4.25
Murcia	13	3.25
Aragon	11	2.75
Balearic Islands	9	2.25
Extremadura	9	2.25
Asturias	9	2.25
Navarre	6	1.59
Cantabria	5	1.25
La Rioja	3	0.75
Ceuta	1	0.25
Melilla	1	0.25
Total	400	100

Table 2. Educational level of respondents

	Frequency	Percentage
Primary education	31	7.75
Compulsory secondary education	25	6.25
Vocational training (intermediate)	37	9.25
Noncompulsory secondary education	69	17.25
Vocational training (higher)	45	11.25
University undergraduate	147	36.75
Graduate and doctoral studies	37	9.25
Other	2	0.50
No studies	3	0.75
No answer	4	1.00
Total	400	100

variables, and one-way analysis of variance (anova) (or Welch’s tests when the equality of means was rejected), with their subsequent post hoc tests. The type I error was determined at 95% ($\alpha = 0.05$), although smaller p values ($\alpha = 0.001$) are also reported to highlight stronger levels of significance.

5. Results

Regarding *RQ1*, the results indicated that the quality of the information provided during the pandemic was considered to be rather low ($M = 2.23$, $SD = 1.084$), as was the quality of the media used for its transmission ($M = 2.40$, $SD = 1.201$). The indicator of the communication management by the government during the pandemic yielded a mean value of 2.32 ($SD = 1.013$), also below the midpoint of the scale. Additionally, Table 3 presents the average values of the measured items and indicators in more detail (Figure 1 offers a more visual approach of these averages). The level of disagreement is found to be quite strong in almost all cases, with a less negative perception only found regarding the provision of information by experts rather than politicians or the government ($M = 2.91$, $SD = 1.373$), while information provided by politicians was perceived more negatively ($M = 1.85$, $SD = 1.118$).

Table 3. Average values of measured items and indicators

Item	N	M	SD
1. The published data are correct	400	2.34	1.267
2. The government has provided information about the current pandemic on time	400	2.18	1.199
3. The government is doing a good job of informing about pandemic prevention via different media	400	2.57	1.356
4. A feeling of security has been conveyed in government press conferences about the pandemic	400	2.24	1.254
5. Politicians have conveyed more security when informing about statistics	400	1.85	1.118
6. Experts have conveyed more security when informing about statistics	400	2.91	1.373
7. Information has been provided in a timely, clear, comprehensible, and precise way	400	2.15	1.192
Indicator of the quality of information	400	2.23	1.084
Indicator of the quality of the media used for the transmission of information	400	2.40	1.201
Indicator of the communication management of the government during the pandemic	400	2.32	1.013

Additionally, note that the correlation between all the dependent variables was strong and positive. Indeed, a negative perception regarding a certain aspect of government communication on the pandemic usually meant a negative perception about the other studied aspects (see Table 4 for the correlations between the studied scale variables). The only element with slightly weaker correlations was the perception about the security conveyed by experts when informing

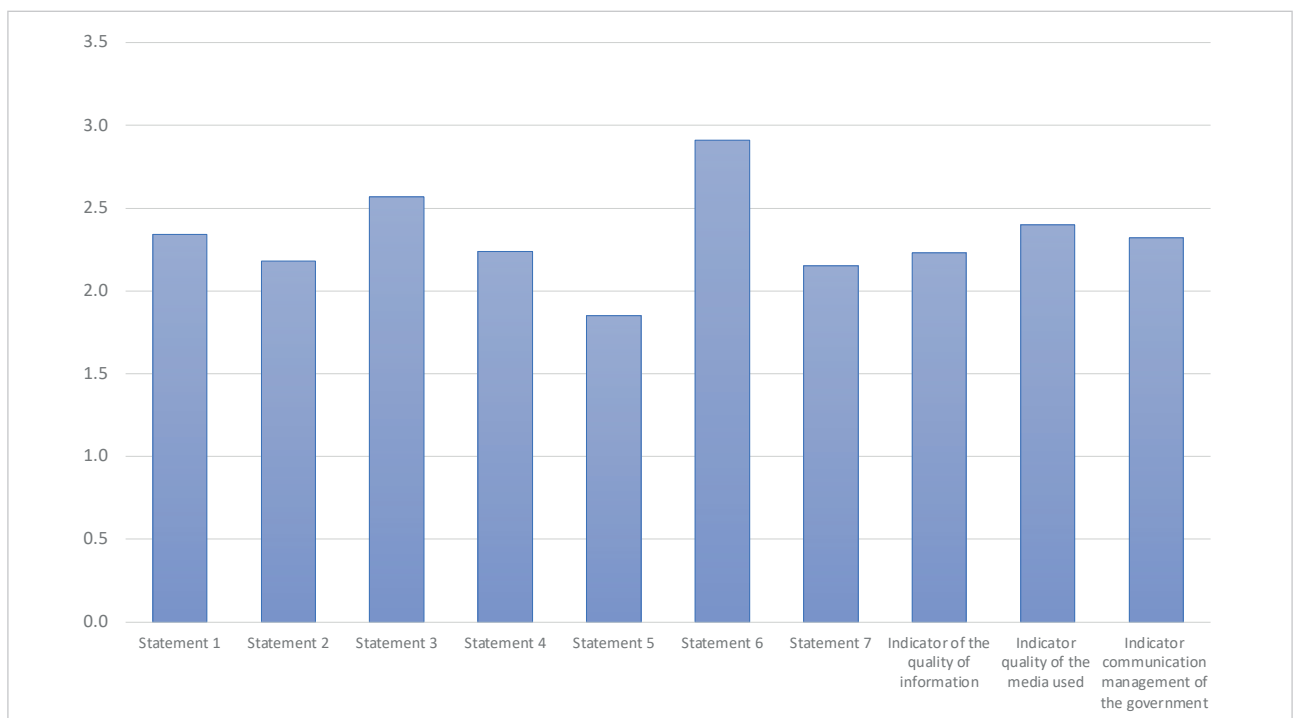


Figure 1. Average values of the items and indicators measured in the study

about statistics, although this correlation always remained above 0.451. Thus, although experts conveyed a greater sense of security than politicians and governmental sources, the perception of all types of sources was generally negative.

Table 4. Correlations between studied scale variables

	Age	Political ideology	Statements							Indicator of the quality of information	Indicator of the quality of the media	Indicator of the communication management	
			1	2	3	4	5	6	7				
Age	1	0.074	-0.054	-0.037	0.021	-0.024	-0.049	0.041	-0.047	-0.052	0.000	-0.024	
Political ideology	0.074	1	-0.241*	-0.219*	-0.230*	-0.273*	-0.206*	-0.224*	-0.199*	-0.247*	-0.272*	-0.282*	
Statements	1	-0.054	-0.241*	1	0.685*	0.653*	0.624*	0.558*	0.451*	0.646*	0.878*	0.695*	0.814*
	2	-0.037	-0.219*	0.685*	1	0.669*	0.685*	0.570*	0.490*	0.733*	0.903*	0.735*	0.849*
	3	0.021	-0.230*	0.653*	0.669*	1	0.693*	0.557*	0.498*	0.674*	0.748*	0.926*	0.841*
	4	-0.024	-0.273*	0.624*	0.685*	0.693*	1	0.618*	0.528*	0.682*	0.745*	0.913*	0.851*
	5	-0.049	-0.206*	0.558*	0.570*	0.557*	0.618*	1	0.469*	0.581*	0.640*	0.638*	0.758*
	6	0.041	-0.224*	0.451*	0.490*	0.498*	0.528*	0.469*	1	0.522*	0.547*	0.557*	0.707*
	7	-0.047	-0.199*	0.646*	0.733*	0.674*	0.682*	0.581*	0.522*	1	0.888*	0.737*	0.850*
Indicator of the quality of information	-0.052	-0.247*	0.878*	0.903*	0.748*	0.745*	0.640*	0.547*	0.888*	1	0.811*	0.941*	
Indicator of the quality of the media	0.000	-0.272*	0.695*	0.735*	0.926*	0.913*	0.638*	0.557*	0.737*	0.811*	1	0.920*	
Indicator of the communication management	-0.024	-0.282*	0.814*	0.849*	0.841*	0.851*	0.758*	0.707*	0.850*	0.941*	0.920*	1	

* $p < 0.001$

To address RQ2, the potential differences based on sociodemographic characteristics were studied. Starting with gender, we conducted Student's *t*-tests for independent samples (the nonbinary person being considered statistically irrelevant). No significant differences were observed regarding perceptions about government communication on the pandemic.

Regarding age, bivariate correlations with the other variables were calculated, revealing no significant correlations between this variable and any of the perceptions or indicators about government communication of the pandemic. Similarly, the one-way anova test revealed that educational level did not have significant effects on perceptions regarding Spanish government communication during the crisis.

Regional differences were also studied using the one-way anova test. Although few significant differences were found, a trend was detected regarding the information quality indicator [$F(16, 381) = 1.564, p = 0.76$], with Navarre having the worst perception ($M = 1.22, SD = 0.544$) and the Balearic Islands the best ($M = 2.89, SD = 1.247$) (see Figure 2). Moreover,

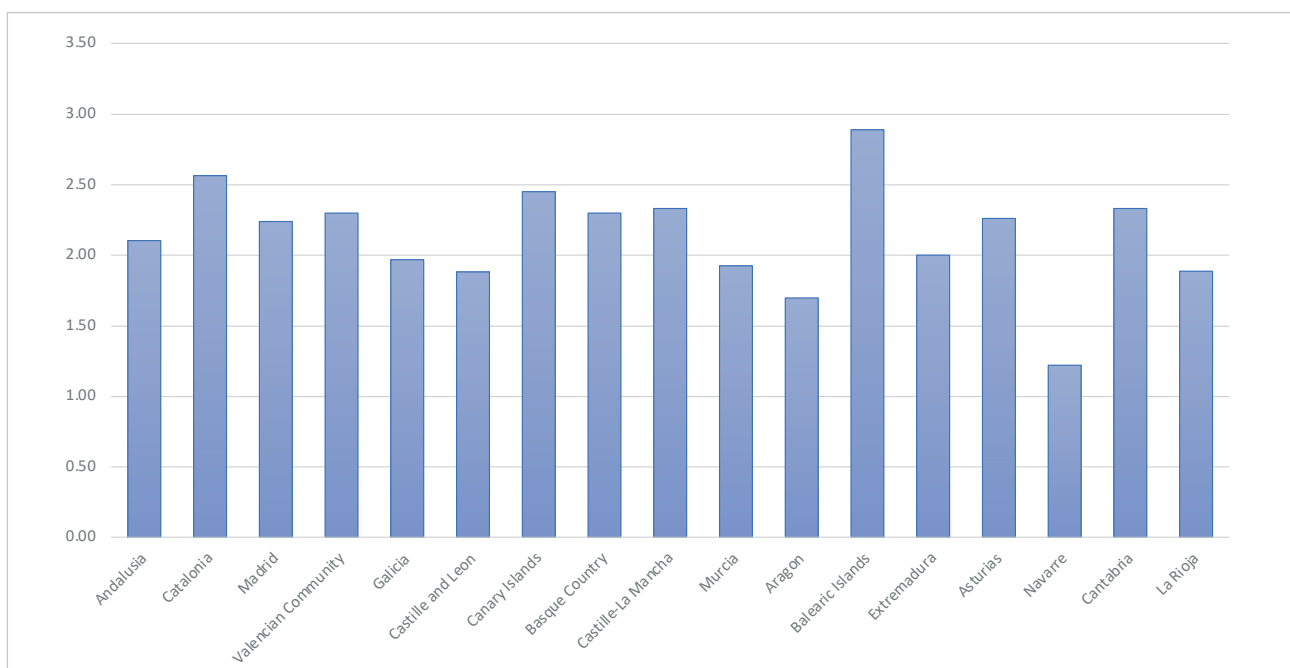


Figure 2. Regional differences regarding the indicator of quality

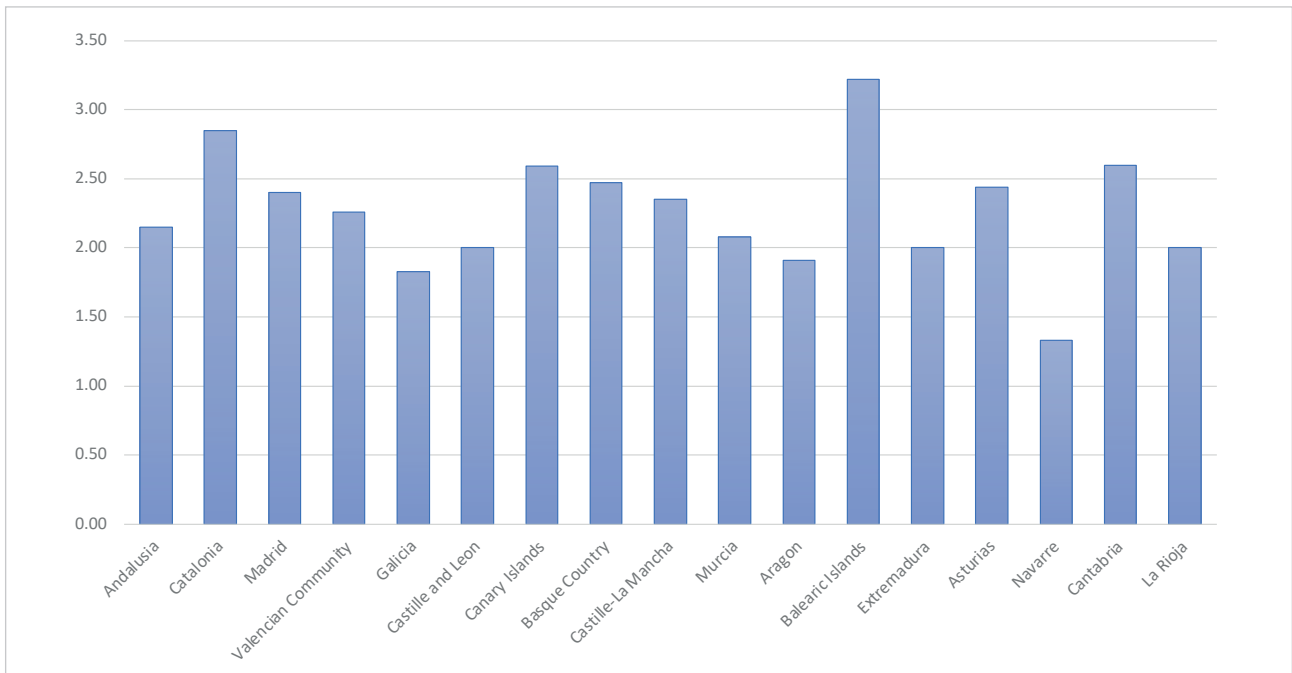


Figure 3. Regional differences regarding the statement “The published data are correct”

one item, i.e., “The published data are correct,” also showed significant differences between regions [$F(16, 381) = 1.911, p < 0.05$], with again Navarre being the region with the greatest disagreement ($M = 1.33, SD = 0.816$) and the Balearic Islands that with the greatest agreement ($M = 3.22, SD = 1.563$) (see Figure 3). Furthermore, the statement “Information has been provided in a timely, clear, comprehensible, and precise way” revealed significant differences according to Welch’s test, given that the equality of means was rejected [$F(16, 55.490) = 2.614, p < 0.01$]. Once again Navarre ($M = 1.17, SD = 0.408$) showed the lowest level of agreement, significantly lower than Catalonia ($M = 2.38, SD = 1.283$), the Valencian Community ($M = 2.30, SD = 1.337$), or Madrid ($M = 2.18, SD = 1.255$) (see Figure 4). Finally, nonparametric tests were carried out to compare the distribution of educational level across the regions, considering the missing values in some cases. The independent-samples Kruskal-Wallis test indicated significant differences [$K(16) = 32.958, p < 0.01$], with respondents from the Basque Country ($M = 5.68, SD = 1.057$) having a significantly higher educational level than those from Andalusia ($M = 3.91, SD = 1.865$).

Testing of $H1$ revealed that political ideology was a determining factor, showing correlations with the three indicators and with the perceptions about all the statements. These correlations were always negative and with moderate effect, showing that people with a more Left-wing position had a more positive image about the communication by the government, which

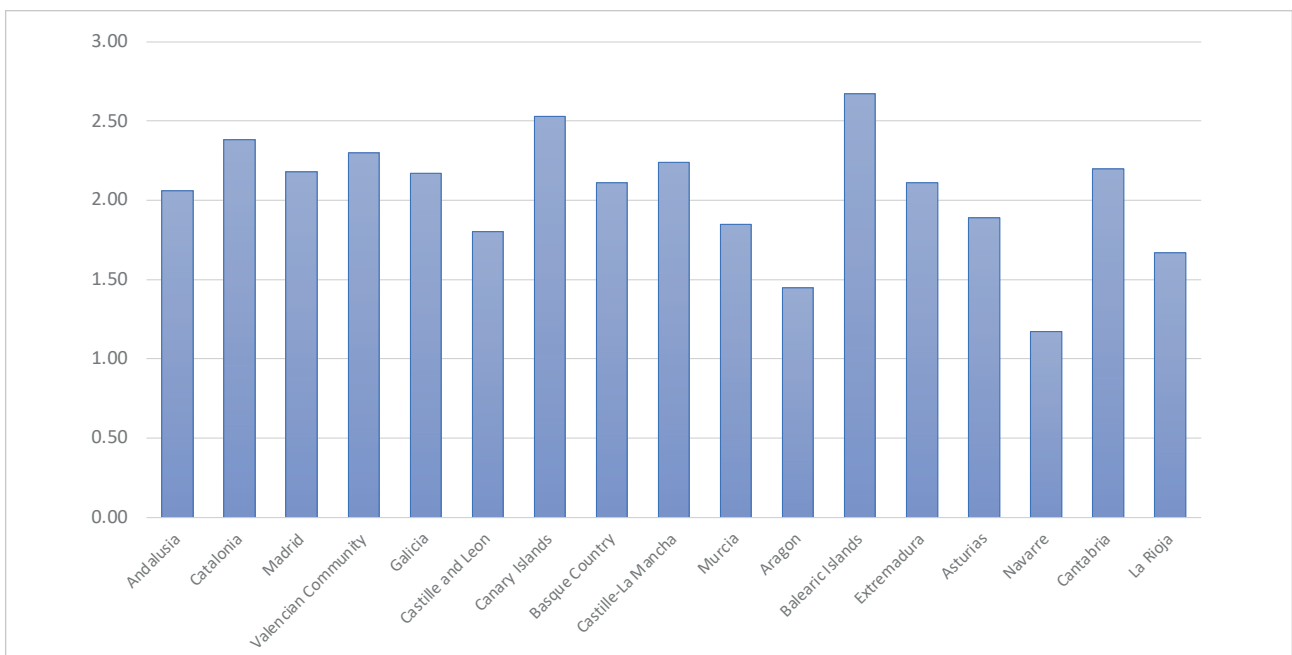


Figure 4. Regional differences regarding the statement “Information has been provided in a timely, clear, comprehensible and precise way”

is a Left-wing coalition. Thus, the quality of the information [$R(398) = -0.247, p < 0.001$], the quality of the media used for its transmission [$R(398) = -0.272, p < 0.001$], and the communication management by the government during the pandemic [$R(398) = -0.282, p < 0.001$] were all perceived as better by people with Left-wing political ideology.

To confirm the effects of ideology, a further preliminary analysis was conducted by classifying the respondents into three groups depending on the party ruling in their region: the conservative opposition *PP*, the socialist government *PSOE* party, or another party. We conducted one-way anova tests and observed various differences. The indicator of the quality of the information revealed significant differences [$F(2, 397) = 3.833, p < 0.05$], being significantly higher among people living in regions governed by third parties ($M = 2.48, SD = 1.057$) than in those governed by the *PP* ($M = 2.34, SD = 1.207$) (Figure 5). The indicator of communication management by the government revealed a trend for a difference [$F(2, 397) = 2.652, p = 0.075$], again with respondents from regions governed by a third party ($M = 2.51, SD = 0.982$) reporting higher values than those in regions governed by the conservative party ($M = 2.22, SD = 0.995$) (Figure 6). Note also that the statement “The published data are correct” revealed significant differences [$F(2, 397) = 6.353, p < 0.01$]. Those living in regions governed by a third party agreed significantly more ($M = 2.74, SD = 1.204$) than those from regions governed by the socialist party ($M = 2.30, SD = 1.269$) or conservative party ($M = 2.18, SD = 1.259$) (Figure 7). Finally, there were significant differences regarding educational level [$F(2, 388) = 4.639, p < 0.05$], which was significantly higher in regions governed by the socialist party ($M = 4.96, SD = 1.685$) than in those governed by the *PP* ($M = 4.40, SD = 1.728$).

To test *H2* on the effects of polarization, the most extreme and, therefore, polarized values of the question about political ideology (2 on the Left and 2 on the Right), representing 13.8% of the whole sample, were selected for comparison against the more central, less polarized values using the Student’s *t*-test. However, no significant differences were found for any of the studied indicators or items, with only educational level tending to be higher among those with more moderate political ideas ($M = 4.75, SD = 1.711$) than among those with more radical ones ($M = 4.28, SD = 1.955$) [$t(389) = -1.828, p = 0.068, d = 0.31$].

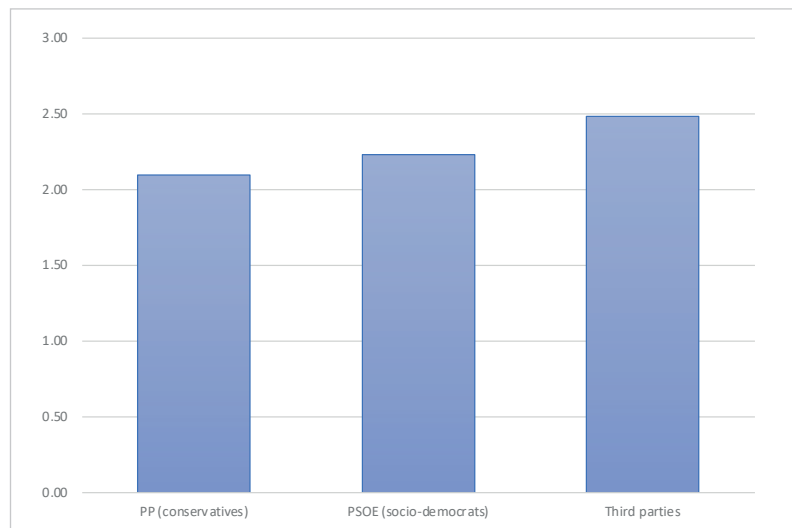


Figure 5. Differences based on the regional ruling party regarding the indicator of quality of the information

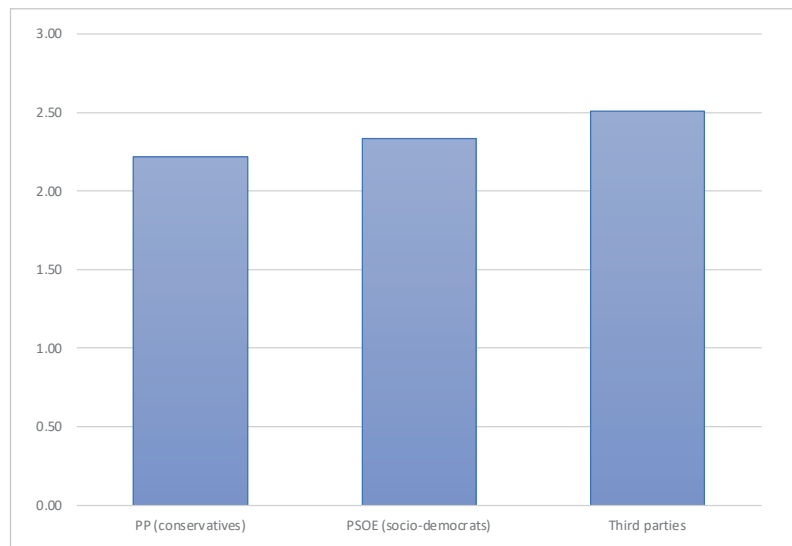


Figure 6. Differences based on the regional ruling party regarding the indicator of communication management by the government

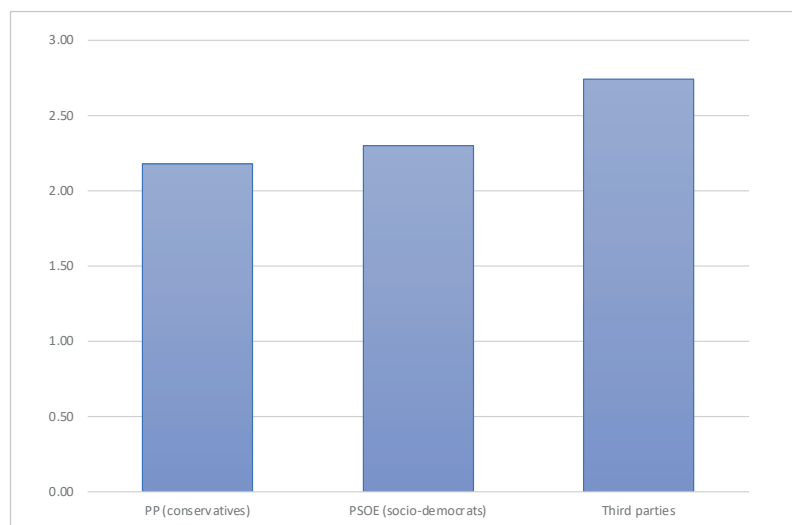


Figure 7. Differences based on the regional ruling party regarding the statement “The published data are correct”

6. Discussion and conclusions

Our first and most fundamental observation is the negative perception of Spanish citizens regarding the communication management of the government during the Covid-19 crisis. All the studied items and indicators showed low values, with only the perception of security transmitted by experts faring slightly better. The correlation between the different items and indicators was positive and strong, indicating that perceptions about all aspects of government communication were negative. Overall, the level of trust in information provided by the government was very low, which may have negatively affected the level of compliance with rules or, at least, reinforced affective polarization. All of this could lead to what one might call “political miscommunication,” a form of political communication influenced by polarized feelings and the threat of disinformation, with greatly reduced levels of trust.

“The indicator of the communication management by the government during the pandemic yielded a value below the midpoint of the scale. The level of disagreement is found to be quite strong in almost all cases, with a less negative perception only found regarding the provision of information by experts rather than politicians or the government, while information provided by politicians was perceived more negatively”

This lack of trust was found to be generalized across society. Indeed, the study results indicate that, in general, age, gender, and educational level did not play a very significant role. Indeed, the only characteristic found to affect the results was place of residence, and even then limited to a few regions with significantly more negative values, such as Navarre.

We hypothesized that ideology would play a relevant role in the trust in government communication during the pandemic, with people located on the Left of the political spectrum having more trust in the information provided by the government, formed by a Left-wing coalition, than those with more Right-wing political views. This effect was found to be significant and moderate in size for all the studied variables, confirming that preexisting political ideas are relevant in determining whether citizens trust such information.

In contrast, and maybe surprisingly, polarization was not found to play a significant role. These observations invite a further discussion about how the level of trust in political communication is influenced by citizens’ attitudes and preconceived ideas, and how polarization, despite its presence, does not present similar results for both poles, especially in the context of a government that is perceived as far Left and, therefore, itself part of such polarization. This observation is, however, only exploratory, given that polarization is not just an individual attribute while extreme ideological values are not the only aspect leading to polarization. However, with the goal of offering some preliminary observations, we followed the approach to measuring polarization used in previous works (Romero-Rodríguez; Tejedor; Pabón-Montealegre, 2021), but future works are needed to understand the specific effect of polarization on perceptions about government communication during this health crisis.

Although further research is needed to improve communication strategies, our study highlights the greater trustworthiness of experts compared with politicians, who engender less trust, which can also be explained by affective polarization, as well as the importance of providing information in a timely fashion, one of the aspects rated most negatively by citizens. In this sense, Fernando Simón Soria, director of the *Center for the Coordination of Health Alerts and Emergencies* of the Spanish *Ministry of Health* and spokesman for the government during the Covid-19 pandemic, was responsible for keeping Spanish citizens informed during this time with the goal of reducing mis- and disinformation. This kind of strategy is, according to the experience in nearby Italy, very useful when facing the acute phase of an infodemic by increasing the visibility of official sources and aiming to restore government credibility by reconnecting with citizens (Lovari, 2020). However, despite being an expert and offering daily information, he also became a highly polarized figure, and it could be expected that his level of trustworthiness might have decreased among certain groups of society.

In general, it is reasonable to suggest that governments should launch evidence-based public information campaigns and interventions ahead of adverse outcomes. Such information campaigns may be especially necessary in the face of negative prevailing public opinion, and well-executed behavioral cohort studies could contribute to this by anticipating the interplay between perceptions, trust, and behavior (Lim *et al.*, 2020). This also indicates that temporal and dynamic variables are fundamental for this type of analysis since, according to Gozgor (2021), trust increases during crises, although this effect tends to fade away quickly. Therefore, it is fundamental to analyze the variation of trust over time because of its dynamic nature (Khodyakov, 2007). The aim of this study was to analyze a wider period by not focusing only on the very early stages of the pandemic, thereby providing a more complete overview. However, further studies applying a longitudinal approach would be very useful to determine how trust changed over time. Additionally, although this study has tried to understand the communication of the crisis during a longer period than the first wave, the Covid-19 pandemic is ongoing and future work based on posterior surveys, especially with broader and representative samples, will be relevant to complement the results of this study.

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