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Protest in times of change. The PROTEiCA project survey

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This paper introduces the PROTEiCA project survey, a dataset designed to explore the normalization of protest participation and the societal impact of large-scale demonstrations. The survey, conducted in 2019, provides a representative sample of the Spanish population aged 18 and over, focusing on the International Women's Day protests—among the largest mobilizations in Spain's history—and their political and social significance. The dataset includes variables on protest participation, and public perceptions of recent and historical mobilizations, enabling robust analyses of contentious events and their effects. This paper outlines the construction of the dataset, detailing the questionnaire design, the cross-sectional methodology with daily tracking over 20 days, and the administration strategy. Key insights into the dataset's value and potential applications for both expert and non-expert researchers are provided, highlighting its contribution to understanding protest normalization and the dynamics of societal change. By making this innovative dataset accessible, the PROTEiCA survey aims to support and inspire future research, fostering new insights into the dynamics of social movements and collective action.

Background & Summary

In recent decades, the expansion of protests has widened participation to include wide sectors of society, making protester profiles increasingly diverse. Low-cost activities such as mass demonstrations have played a crucial role in this normalisation process[1]. The rise of digital society has further accelerated this trend by amplifying participation and visibility[2]. Changes in the media environment and communicative practices have not only facilitated protest but have also reshaped the very nature of protests actions and social movements[3–5].

This article presents the PROTEiCA project survey, a dataset designed to examine the normalization of protest participation and the broader societal impact of large-scale demonstrations in Spain. This survey is part of a broader research project PROTEiCA "Protest, Learning an Change" funded by FEDER / Ministry of Science, Innovation and Universities-State Research Agency -Reference CS2017-84861-P-) The survey, conducted in 2019, between 25 February and 16 March, provides a representative sample of the Spanish population aged 18 and over, with a specific focus on the International Women's Day protest, a landmark event —among the largest mobilizations in the country's history. By incorporating questions on the 2018 and 2019 protests, as well as recollections of the 15 M movement "the Spanish Indignados", the dataset enables an in-depth analysis not only about protesters profile but also of how mass mobilizations influence protester profiles and public perceptions.

Beyond describing the dataset, this article highlights its relevance for understanding contemporary protest dynamics. Large-scale, highly publicized demonstrations have played a crucial role in normalizing protest participation, and this survey allows researchers to assess both their immediate and long-term effects. The study employs a cross-sectional design with daily tracking over 20 days, capturing shifts in public attitudes. By outlining the survey's design, administration, and key variables, this article provides a resource for scholars investigating the evolving role of protest in democratic societies.

Large protest as normalising events. Recognising the importance of structural factors, this study argues that the normalisation of protest participants occurs in bursts, triggered by significant or "transformative" events[6]. These events attract less typical profiles, serving as political learning experiences that foster future political involvement participation[7,8].

Spain offers a compelling case for examining this phenomenon. Surveys consistently rank it among the European countries with the highest percentage of demonstrators[9]. Over time, the profile of Spanish protesters has become more diverse, particularly in terms of gender, age, and, to a lesser extent, habitat, education, and

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ideology[9]. Notable trends include the increased participation of older adults, women, and even conservative groups—though the latter remain underrepresented[10]).

Key moments in fostering this Spaniards' proclivity towards extra-institutional forms of participation include mass mobilisations such as those against ETA terrorism in the 1990s, the Iraq War, or the 11 March terrorist attacks in Madrid. These events were politically significant and served as collective learning experiences that introduced peaceful protest to previously inexperienced sectors[10]. Later, the 15 M movement and the anti-austerity and pro-democracy protests during the Great Recession reinforced the perception of protest as a legitimate form of participation[8].

This study posits that such transformative events act as catalyst normalising moments, expanding participation beyond the traditional profiles of critical and progressive citizens.

Large protest events effects on the public. Protest events have also evolved in how they engage the public. In today's hybrid media environments[11], protests gain visibility across broader audiences, enhancing their capacity to resonate with the public. Citizens increasingly move beyond their traditional role as passive recipients of information, actively engaging with protest content by sharing and commenting through social media networks. These changes have made the public an even more central actor in the political significance of protests.

Despite this growing importance, the connection between protest events and the public has only received scattered empirical attention[12]. Existing literature have examined how protests, and social movements, shape media agendas[13] and influence citizens' political attitudes[14,15]. Other have analysed how factors like size or violence affect media coverage[16] or modulate political elites' responsiveness and support from the public[17,18]. However, the processes of enlargement and activation of the public during protest events remain unexplored.

This research contributes to emerging research line on the relationship between protest and the public[19], aiming to conceptualise and empirically analyse how protest events can enlarge and activate the public. We posit that as protest become hybrid media events, the public gain centrality in contentious processes by growing larger and extending citizens' engagement beyond the protest day, amplifying the political significance of these actions.

The International Women's Day in Spain as an informative case. The mobilisations for International Women's Day in Spain in 2019, known as the 8 M movement, were among the largest demonstrations in the country's recent history, with around 20% of adults reportedly participating[20]. These protests helped consolidate Spain's position at the forefront of the global fight for gender equity. They offer a valuable case for analysing both the normalisation of protester profiles and the broader public impact of this type of contentious events.

This study draws on data from the PROTEiCA project survey, a representative sample of the Spanish population aged 18 and over, conducted in 2019. The questionnaire included specific questions about the International Women's Day protests, the similarly large mobilisation of the previous year, and recollections of the 15 M movement from the early 2010s. This design enables the analysis of whether these protests were politically significant events that both reflected and reinforced the normalisation of protest participation. The survey employed a cross-sectional design (Johnston & Brady, 2012), with daily tracking over 20-day period before and after the event, in order to analyse its broader public impact. Some research has already been published in relevant publications in the social sciences using PROTEiCA survey data[8,20,21]. This paper intends to make these data public and open access for the benefit of the research community and society.

This paper introduces the PROTEiCA project survey. It begins by describing the sets of variables included in the questionnaire. Next, it outlines the survey's design, administration strategy, and fieldwork. Finally, it presents exploratory analyses to guide future researchers in utilising and maximising the survey's potential.

Methods

This section details the data production processes of the PROTEiCA survey, including sampling strategy, questionnaire administration, fieldwork implementation, and weighting procedures. These methodological considerations ensure the reliability and representativeness of the dataset for further analysis.

Sample. The survey had a theoretical framework focused on people aged 18 and over living in Spain, reducing the sample framework to those people with a mobile phone. This sampling frame has a coverage of 95% of the theoretical frame according to the Household Panel of the Spanish National Commission for Markets and Competition, 7th wave in 2018. For the sampling process a Random Digit Dialling technique has been used, i.e. random dialling among all possible ranges of mobile numbers, which is equivalent to Random Sampling.

Concerns regarding coverage bias in telephone surveys—particularly those relying exclusively on mobile phones—are well-documented in the methodological literature[22,23]. Such bias arises when the sampling frame fails to adequately represent the target population as theoretically defined. This issue is especially relevant in low- and middle-income countries, where mobile phone penetration may be uneven across key sociodemographic groups[24,25]. However, in the case of Spain, the risk of coverage bias is extraordinarily marginal. This statement is supported by the analysis of data from the Spanish National Statistics Institute (INE). Specifically, Table 1 presents findings derived from the exploitation of data from the 2019 Survey on Equipment and Use of Information and Communication Technologies (ICT) in Households[26], conducted by the INE. The table provides a comparative analysis of mobile phone ownership across various variables of interest: age groups, municipality size, and population density, all disaggregated by gender. The results indicate that, although a lower proportion of older individuals reside in less populated or lower-density municipalities—and that a gender gap exists whereby women are disproportionately affected by lower rates of mobile phone ownership—mobile phone usage is nevertheless widespread. The lowest ownership rate is found among elderly women, yet even within this group, approximately three-quarters report owning a mobile phone.

		Male (%)	Female (%)
Age groups	15–25	99,5	99,7
	25–34	99,1	99,0
	35–44	98,7	99,2
	45–54	97,2	99,3
	55–64	96,1	96,2
	65+	79,1	74,0
Size of municipality	>500 K inh.	95,0	91,1
	Capitals >500 K inh.	93,6	91,2
	100K–499K	93,5	91,6
	50K–99K inh.	93,6	91,8
	20K–49K inh.	91,7	91,2
	10K–19K inh.	92,0	87,7
	<10 K inh.	89,4	85,1
Population density	Densely populated area	94,1	91,5
	Intermediate populated area	91,7	89,8
	Thinly populated area	88,6	83,1

Table 1. Mobile phone ownership by age group and area of residence, disaggregated by gender.

Mobile phone coverage in Spain is both widespread and demographically balanced. As of 2019, more than 98% of households in Spain had access to mobile phones, far exceeding the 75% coverage for fixed-line telephony. Moreover, traditional sources of concern for undercoverage—namely rural populations and older adults—also exhibit very high levels of mobile phone access and usage. Specifically, more than 85% of individuals in municipalities with fewer than 10,000 inhabitants possessed a mobile phone. Among the elderly population, mobile phone ownership and declared usage are likewise high: 79% of elder men and 74% of elder women has a mobile phone. Thus, from a gender perspective, the potential for differential coverage is similarly negligible. Within the subpopulations typically associated with higher risk of exclusion—such as older individuals and residents of small municipalities or thinly populated areas—gender gaps in mobile phone access and usage are minimal.

In addition to the inherently high and equitable levels of mobile phone penetration across sociodemographic groups, the study further mitigates any residual risk of coverage bias through the application of post-stratification weighting, as explained in subsequent sections. Moreover, the survey implemented a stratified sampling approach based on quotas to ensure representativeness from the outset. Specifically, the survey sample design was a rolling cross-section survey for which a theoretical sample of 100 interviews per day was established for the 20 days of implementation. This daily sample was controlled for gender, age and habitat quotas as shown in Table 2. Population, as shown in the Table is based on the Continuous Register Spanish National Statistics Institute as of 01/01/2018.

As a result of the application of the PROTEiCA survey design, the maximum sampling error for a 95% confidence level considering perfect simple random sampling (100% coverage and RR = 1), in the estimation of proportions assuming p = q = 50% is ±2.1% for the overall sample. The sampling error for the pre-post 8 M mobilisation subsamples is ±2.8% (pre) and ±3.2% (post). Likewise, the sampling error for the daily subsamples ranges from ±8.9% (07/03/19) to ±9.8% (25/02/19).

Administration and fieldwork. Data collection for the PROTEiCA survey was carried out between 25 February 2019 and 16 March 2019. This data collection followed an ethical protocol approved by the Ethical Research Committee of the Autonomous Government of Andalusia (code 1581-N-18) and authorized by the Vice-Chancellor of Research at the Universidad Pablo de Olavide. The fieldwork was carried out by the company Herodato SL. Thanks to knowing in advance the date of the protest and the expectation that it would again be massive as it was in the previous edition in 2018, a CATI survey was designed in advance following a rolling cross-sectional design implemented through a daily tracking over 20 total days, including before and after the protest day.

From 25 February onwards, an attempt was made to contact 12943 (excluding numbers for which the SMS was not delivered and numbers belonging to business directories, hence the low incidence of ineligible lines) randomly generated mobile phone numbers, which were sent an SMS text message of the following type: 'Good afternoon, Pablo de Olavide University invites you to a survey at www.proteica.net/carta.asp?z=xxx. Kind regards'. In addition, a total of 32476 telephone calls were made. The sending of SMS was dosed, with a variable proportion being set according to the daily dialling capacity of the interviewers and their achievement of the target of at least 100 interviews per day.

Ultimately, the mode of administration of the questionnaire consisted of a mixed CATI-CAWI methodology through a structured questionnaire guided by an interviewer, with the alternative of carrying it out via the Internet through the proteica.net website. Specifically, Table 3 lists the frequency of interviews according to the mode of administration (*CATI-CAWI* refers to interviews initiated by CAWI and closed by CATI). It is worth mentioning that the interviews conducted online have less social desirability bias, but as they were

	Male	Male	Male	Female	Female	Female	Rural	Urban
	18 to 34	35 a 54	55 y mas	18 a 34	35 a 54	55 y mas	<10 K pop.	>= 10 K pop.
POPULATION[1]	11,4%	19,6%	17,5%	11,1%	19,3%	21,0%	20,7%	79,3%
25/02/2019	11	26	20	9	24	10	24	76
26/02/2019	13	23	18	12	21	24	24	87
27/02/2019	13	28	18	8	20	16	20	83
28/02/2019	12	25	17	15	23	16	16	92
01/03/2019	12	22	18	12	21	18	23	80
02/03/2019	13	25	18	14	24	13	22	85
03/03/2019	15	25	21	10	25	14	21	89
04/03/2019	14	25	18	15	17	20	22	87
05/03/2019	12	22	20	11	23	20	21	87
06/03/2019	12	25	23	8	21	16	14	91
07/03/2019	14	28	20	16	22	22	27	95
08/03/2019	13	30	20	11	22	19	18	97
09/03/2019	13	27	15	14	23	15	20	87
10/03/2019	10	26	21	10	28	13	23	85
11/03/2019	13	26	18	13	20	17	21	86
12/03/2019	13	22	19	13	22	14	20	83
13/03/2019	12	23	18	13	22	15	19	84
14/03/2019	13	22	20	14	23	15	19	88
15/03/2019	13	21	20	12	21	16	20	83
16/03/2019	11	24	14	14	22	16	22	79

Table 2. Daily sample design controlled for gender, age and habitat quotas. [1]Source: PROTEiCA project survey.

Mode	Interviews	%	Average length of time (minutes)
CATI	1,856	85,97	12.0
CAWI	294	13,62	11.9
CATI-CAWI	9	0,42	11.7
Total	2,159	100	12.0

Table 3. Frequencies of interviews according to mode of administration. Source: PROTEiCA project survey.

self-administered, they were independently audited by 5 student trainees from the Sociology Department of the Pablo de Olavide University, verifying gender and postcode. After this audit, 2 interviews were cancelled.

Lastly, with respect to the questionnaire itself, the response of respondents was required, although it accepted as a response category the options 'Don't know' or 'No answer' which were not offered directly. In addition, where appropriate, alternative response categories are included which the interviewer is instructed not to read. For example, in P09, in response to the question 'And do these mobilisations on 8 March, for International Women's Day, arouse rather positive or rather negative feelings in you?', in addition to the response categories 1 - Rather positive and 2 - Rather negative, there are two other response categories that were not explicitly mentioned but were recorded if the person referred to them spontaneously: 3 - No feelings at all and 4 - Positive and negative. Similarly, throughout the questionnaire, annotations were included for the interviewers to clarify the questionnaire, although they were not to be read directly to the respondent. All these differences are referred to in the questionnaire through changes in the font.

Weights. The actual daily sample shown in Table 2 ranged from 100 on 25/02/19 to 122 on 07/03/19. This actual sample is weighted with daily value 100 for the analysis of daily sub-samples by sex and age groups. This weighting is controlled by the variables PESO20/WEIGHT20, PESO2/ WEIGHT2 & PESO/WEIGHT as shown in Table 2. For the pre-post 8 M analysis (subsamples from 25/02 to 07/03 and from 08/03 to field closure) and the overall analysis, the subsamples and overall sample were also weighted respectively by sex and age, as there is a significant deviation in middle-aged men and older women. The descriptives of this deviation are presented in Table 4. As the rural vs. urban habitat size was naturally self-weighted, because of the reduced coverage bias, there is no significant deviation as shown in Table 5.

Questionnaire structure. In the following, we describe the blocks of variables and questionnaire questions of which the PROTEiCA dataset is composed.

Political attitudes and electoral behaviour. The first block of questions in the PROTEiCA questionnaire addresses questions on political attitudes, media consumption and electoral behaviour. These questions are crucial to examine and put into context individuals' opinions and participation in protest forms of political

Sex	Age	Sample	% Sample	% Population	Deviation
Men	18–34	252	11,7%	11,4%	0,3%
Men	35–54	503	23,3%	19,6%	3,7%
Men	55+	379	17,6%	17,5%	0,1%
Women	18–34	246	11,4%	11,1%	0,3%
Women	35–54	450	20,8%	19,3%	1,5%
Women	55+	329	15,2%	21,0%	−5,8%

Table 4. Descriptives of sample deviations on sex and age. Source: PROTEiCA project survey.

Habitat	Sample	% Sample	% Population	Deviation
Rural (<10 mil pop.)	420	19,5%	20,7%	1,2%
Urban (>=10 mil pop.)	1739	80,5%	79,3%	−1,2%

Table 5. Descriptives of sample deviation on habitat. SOURCE: PROTEiCA project survey.

participation such as demonstrations. The link between protest participation and electoral political participation, as well as the correlations with individuals' political attitudes is a classic line of research that remains fertile and of interest[27–30]. Similarly, the role of political information and influence on protest participation of interpersonal networks and, more recently, social networks is another field of study of great relevance[31–33].

In terms of political attitudes, the PROTEiCA survey addresses interest in politics, exposure to news and media through the consumption of (a) TV news programs; (b) other current events political TV programs; (c) radio news programs; (d) newspapers (print and/or digital); (e) political events with people close to you (family, friends, people at work, etc.); use of social networks for activities related to a social or political issue of interest; and a scale of ideological self-placement (left-right). In terms of political voting behaviour, information is collected on voting in the last elections, voting intentions in the next elections and closeness to political parties.

Political opinions and assessments. This second block includes two sets of variables. The first, relating to individuals' opinions and evaluations of the functioning of democracy and their capacity to influence the democratic decision-making process, are well established and widely recognised in the literature. In this group one finds questions measuring satisfaction with democracy; political efficacy (external); political efficacy (internal); and responsiveness. In particular, the use of a pair of questions that deal with both internal and external dimensions of political efficacy is a logic adopted since the ESS round 7 and 8 as a result of the analysis and recommendation made by Saris & Torcal[34].

The second set of variables consists of an original set of questions that ask respondents to state their level of agreement with different statements related to gender inequality, equality policies and the feminist movement. Specifically, these questions measure prioritisation of gender equality issues, consideration of the persistence of discrimination against women, opinion on the need for specific gender equality laws, sympathy for feminist movement and feeling of belonging to the feminist movement. The use of these variables is useful for researchers as it will allow them to examine the extent to which people's opinions and feelings are related to their participation in protests or their assessment and evaluation of the feminist mobilisations on IWD.

Opinion and participation in feminist and other demonstrations. The third block of variables is the most extensive and the one that provides the most novel information, as it focuses on an outstanding event in Spanish and comparative politics such as the mobilisations around 8 M - International Women's Day that took place in those years[20,35,36]. A large part of them refers to the 2019 IWD mobilisations. Specifically, it asks about awareness of IWD mobilizations, interest on IWD mobilizations; the media through which you have been informed about these mobilisations, the frequency with which you (a) discussed with people close to you, (b) searched for information on the internet, (c) exchanged information by message or social media, (d) responded to messages or posts about IWD mobilisations, whether you encouraged to participate or not to participate in the IWD mobilizations, the perception of the necessity of the 8 M mobilizations, the emotions caused by the 8 M mobilizations, the opinion about the importance of 8 M mobilization demands and finally about membership in feminist groups and participation in the 8 M mobilizations of 2019.

However, a second set of questions refers to IWD mobilisations in previous years, as well as other types of mobilisations at the time of the survey and earlier historical events. Specifically, respondents are asked whether they participated on IWD mobilizations in 2018 and in mobilizations prior to 2018, whether they have participated in mobilizations during the last 12 months regardless of the issue motivating the protest, whether they remember the 15 M movement ('Los Indignados'), their sympathy towards those mobilizations and whether they participated in them. This second block of variables allows researchers using the PROTEiCA survey to go deeper into research that puts the 2019 IWD mobilisations into context. In fact, it is possible to do so both longitudinally, by comparing participation in these protests in previous years, and across different types of events and political issues by comparing feminist and gender equality mobilisations with other types of mobilisations, generically, and with those of the 15 M movement, that is, with the previous cycle of mobilisations resulting from the aftermath of the Great Recession and the austerity policies and cuts to the Welfare State[37–40].

Sociodemographics. The sociodemographic variables block measures personal characteristics of individuals and their families and household composition. Regarding the variables on individuals, information on gender, age (and age group), labour situation, level of education attained, postal code is included. Regarding the information on the families of the interviewees and the composition of their households, we asked about whether they lived with a partner, the distribution of household work, partner's gender, number of children and their gender. The inclusion of these variables is relevant both for observational studies and for examining sociodemographic profiles of protest participation and attitudes towards gender equality and the feminist movement. Indeed, the inclusion of an extensive block of sociodemographic variables may be useful for the research pathway on the normalisation of protest[1,41,42].

Data processing and confidentiality measures. In relation to the processing of personal data obtained in this survey, confidentiality, informed consent, and anonymity were ensured. Telephone numbers were randomly generated, and no personally identifiable data was collected. Responses were handled confidentially and reported only in aggregated statistical form. Personal data, used solely for quality control, was separated from responses through an arbitrary and random key. Data protection measures complied with GDPR regulations, and anonymization was applied after data collection. The study adhered to research quality standards (UNE ISO-20252, ICC/ESOMAR) and accessibility guidelines (UNE 139803, WCAG 1.0). Participants had the option to opt out at any time.

Participants were informed from the outset that their anonymised responses could be used for scientific and research purposes, in accordance with Spanish Law 12/1989 on statistical confidentiality and the European General Data Protection Regulation (GDPR). Consent was obtained prior to participation, and the information provided included assurances regarding confidentiality, anonymity, and the potential future use of data for research. No personally identifiable information was retained after anonymisation, and all data sharing was restricted to aggregated statistical outputs. These safeguards ensured that consent extended to the scientific use of anonymised data while fully preserving participant privacy and legal compliance.

Data Records

The dataset from the PROTEiCA project survey is publicly available in open access through the Figshare repository[43]. It is provided in both CSV and DTA formats, ensuring compatibility with various statistical software. The dataset follows the standard structure of opinion surveys in the social sciences: each row represents an individual respondent, while each column corresponds to the response category for each questionnaire item. Additionally, the repository includes comprehensive documentation, including the full survey questionnaire in both English and Spanish, as well as detailed instructions for data access and use. These materials facilitate transparency and reproducibility, allowing researchers to effectively analyse the relationship between protest participation, learning processes, and political change.

The PROTEiCA survey dataset, derived from the questionnaire, comprises 155 variables systematically organized into five main groups. The following section provides a detailed overview of the questionnaire's content, explaining its thematic structure and the specific dimensions covered by each group of variables: (1) Political attitudes and electoral behaviour; (2) Political opinions and assessments; (3) Opinion and participation in feminist and other demonstrations; (4) Contextual variables; and (5) Sociodemographics. Table 6 presents all variables in the dataset, linking each column header (i.e., the questionnaire code) to the content of the variable it captures.

Metavariables. In addition, the dataset includes a set of metavariables that provide essential information about the coding and interview process. These metavariables capture details such as the questionnaire identifier, date and time of the survey, tracking day, interview duration, and mode of administration. They also include interviewer characteristics (sex and identity), telephony operator data, and key cross-tabulations by sex, age group, and survey timing relative to the 8 M/IWD protests. A complete list of these metavariables is presented in Table 7. Column headings are referenced separately in both the original Spanish version and the English-translated version of the dataset.

Technical Validation

With the purpose of ensuring the validation and quality of the data produced in the survey, a pilot test was carried out. The results were analysed and the different incidents that occurred were managed in order to refine the instrument of measurement and the data to be obtained. Prior to the implementation of the questionnaire, the questionnaire was pilot-tested on 2 and 8 February to adjust it to a 12-minute time frame, to reformulate some questions appropriately and to right-size the interviewing team. A team of 11 interviewers was formed, and due to the research topic, gender parity was controlled (5 men and 6 women), holding a briefing session on 16 February.

Furthermore, we monitored the process of random dialling and contact with the respondents. Each phone number not contacted in the first dialling and eligible was redialled in a different time slot with an average of 3.2 dialling. The distribution of the different incidents and their management is shown in Table 8. In addition, during the implementation of the fieldwork, a series of calculations and metrics of standardised AAPOR result rates were collected. These results are reflected in Table 9.

Although the response rate for the PROTEiCA survey is moderate, this is a relatively widespread phenomenon in surveys relying exclusively on mobile phone random digit dialling (RDD), particularly when compared to face-to-face (CAPI) or even CATI surveys based on pre-established samples[24,44,45]. Indeed, a well-known 2017 Pew Research Center report—published two years prior to the PROTEiCA survey—already noted that telephone surveys had experienced a sustained decline in response rates, stabilising below 10%, a figure

a	
Variable	**Questionnaire**
Political attitudes and electoral behaviour	
Political interest	P01
News exposure on…	
a) TV news programs	P02A
b) Other current events political TV programs	P02B
c) Radio news programs	P02C
d) Newspapers (print and/or digital)	P02D
e) Political events with people close to you (family, friends, people at work, etc.)	P02E
Use of social networks for activities related to a social or political issue of interest	P21A-P21D
Self-placement in ideological (left-right) scale	P18
Vote in last elections	P19-P19B
Vote intention	P20
Party closeness	P20B
Political opinions and assessments	
Satisfaction with democracy	P03
Political efficacy (external)	P04
Political efficacy (internal)	P06
Responsiveness	P05
Agreement with:	
a) Prioritization of gender equality issues	P11A
b) Persistence of discrimination against women	P11B
c) Need for specific gender equality laws	P11C
d) Sympathy for feminist movement	P11D
e) Feeling of belonging to the feminist movement	P11E

b	
Opinion and participation in feminist and other demonstrations	
Awareness of 8 M mobilizations	P07
Interest on 8 M mobilizations	P07B
Media information about 8 M mobilizations	P07C
Frequency of discussing 8 M mobilizations with people close to you	P07D1
Frequency of Internet search for information on 8 M mobilizations	P07D2
Frequency of exchange of information by message or networks on the issue of 8 M	P07D3
Frequency of response to messages or publications on the issue 8 M	P07D4
Encouraging people to participate in 8 M mobilizations	P07D5
Encouraging people to NOT participate in 8 M mobilizations	P07D6
Perception of the necessity of the 8 M mobilizations	P08
Emotions caused by the 8 M mobilizations	P09-P09B
Importance of 8 M mobilization demands	P10-P10B
Participation on 2019 8 M mobilizations	P12-P12B
Membership of a feminist group	P13-P13C
Participation on 2018 8 M mobilizations	P14
Participation on previous (before 2018) 8 M mobilizations	P15
Participation on mobilizations last 12 months (regardless issue)	P16-P16B
Memory of the 15 M movement ('Indignados')	P17
Sympathy for 15 M movement	P17B
Participation on 15 M mobilizations	P17C
Sociodemographics	
Gender	P22
Age	P23
Labour situation	P24
Education	P25
Postal code	P26
Living with a partner	P27
Distribution of household work	P27B

Continued

b	
Opinion and participation in feminist and other demonstrations	
Partner's gender	P27C
Children	P28
Children's gender	P28B
Weights	
Weighting for daily tracking analysis	PESO20 / WEIGHT20
Weighting for pre-post analysis 8 M/IWD	PESO2 / WEIGHT2
Weighting for global analysis	PESO / WEIGHT

Table 6. **a**. Variables of PROTEiCA survey. **b**. Variables of PROTEiCA survey. Source: PROTEiCA Proyect Survey

Variable (ES)	Variable (EN)	Description
ID	ID	Questionnaire identifier
FECHA	DATE	Date and time of the survey
DIA	DAY	Tracking day
HORA	HOUR	Time of survey
CODENC	CODEINT	Interviewer
SEXENC	SEXINT	Sex of interviewer
MODO	MODE	Mode of administration of the questionnaire
DUR	DUR	Duration of interview (minutes)
TRAMO20	PHASE20	Daily tracking
TRAMO2	PHASE2	Before and after 8 M/IWD

Table 7. Metavariables of PROTEiCA survey. Source: PROTEiCA project survey.

considerably lower than the response rate achieved in the PROTEiCA survey[46,47]. That same report further concluded that falling response rates did not produce markedly different respondent profiles in terms of voter registration, although telephone respondents did tend to exhibit somewhat higher levels of civic engagement compared to non-respondents.

Nonetheless, nonresponse remains a key concern—alongside coverage bias—as one of the principal methodological risks in this type of survey design. The issue of coverage bias has already been addressed in previous sections, where we argued that, in the Spanish context, its impact is likely to be minimal due to the near-universal penetration of mobile phones across demographic groups. Regarding nonresponse, the primary sources identified were, as shown in Table 8, in order of frequency: explicit refusal to participate, postponement of the interview, and lack of response to repeated contact attempts. To mitigate these issues, respondents were given the alternative option of completing the interview online via the CAWI interface hosted on proteica.net.

Despite these mitigation strategies, an assessment of potential nonresponse bias remains advisable. One of the most widely used approaches involves comparing early and late respondents[48], under the assumption that late respondents share characteristics with those who ultimately refused to participate[49]. This comparison can help identify whether systematic differences exist between social groups in terms of likelihood to respond, thereby offering insight into potential nonresponse bias. Table 10 presents a comparative analysis between early and late respondents to the survey. Specifically, it examines key variables intended to capture citizens' profiles and their socio-political interest and awareness—including political interest and awareness, political efficacy, social media consumption, and ideological positioning. The analysis is structured around three respondent pairings, defined by their timing of participation in the fieldwork: those below the 1st percentile versus those above the 99th, the 5th versus the 95th, and the 10th versus the 90th percentile.

Notably, the earliest respondents—those who took part at the very outset of the data collection period—serve as a critical reference point. When these individuals (below the 1st percentile) are compared with the very latest participants (above the 99th percentile), the analysis reveals no statistically significant differences at the 95% confidence level across the variables examined. This finding strongly suggests that those who responded first—arguably the most motivated or engaged—are not systematically different from those who responded last. As the comparison range broadens (5th vs. 95th and 10th vs. 90th percentiles), only marginal differences emerge, mainly in television news consumption and external political efficacy. Still, these variations are limited and do not point to a consistent pattern of nonresponse bias. Thus, the consistency observed among the earliest and latest respondents provides robust evidence against substantial bias due to response timing.

Usage Notes

To conclude the presentation of the PROTEiCA survey dataset, we explore some key areas of research already pointed out in the introductory section in order to provide potential users of our datasets with some insights on how to exploit it. We focus specifically on a set of indicators that illustrate how the celebration of the International Women's Day (IWD) protests constitutes a transformative event, with implications for both the

Final ranking	Response category	Eligible	Frequency	%
Interview conducted	Full survey	Yes	2159	16,7%
Abandon interview	Partial survey	Yes	294	2,3%
Refuses to collaborate	Negative	Yes	3445	26,6%
No answer	No contact	Yes	1312	10,1%
Answering machine	No contact	Yes	899	6,9%
Switched off or out of coverage	No contact	Yes	697	5,4%
Communicates / Busy	No contact	Yes	94	0,7%
Postponed	Other type of non-answer	Yes	1424	11,0%
Foreign / Does not speak Spanish	Other type of non-answer	Yes	248	1,9%
Off-hook and not speaking	Other type of non-answer	Yes	225	1,7%
Hanging up without answering	Other type of non-answer	Yes	205	1,6%
Out of quota	Other type of non-answer	Yes	93	0,7%
Is very old / Disabled	Other type of non-answer	Yes	77	0,6%
No signal	Not eligible	No	721	5,6%
Company	Not eligible	No	352	2,7%
Number does not exist	Not eligible	No	222	1,7%
Broken	Not eligible	No	190	1,5%
Restricted calls	Not eligible	No	133	1,0%
Underage	Not eligible	No	133	1,0%
Fax	Not eligible	No	14	0,1%
Resides abroad	Not eligible	No	12	0,1%

Table 8. Distribution of survey administration incidents and their management. Source: PROTEiCA project survey.

Response rate	Cooperation rate	Refusal rate	Contact rate
Proportion of the intended sample that participates.	*Proportion of respondents contacted who participate.*	*Proportion of the sample that refuses to participate.*	*Proportion of sample successfully contacted for interview (whether or not they participate).*
RR1 = 0,189	COOP1 = 0,320	REF1 = 0,340	CON1 = 0,592
RR2 = 0,215	COOP2 = 0,364	REF2 = 0,347	CON2 = 0,604
RR3 = 0,193	COOP3 = 0,341	REF3 = 0,397	CON3 = 0,691
RR4 = 0,219	COOP4 = 0,388		

Table 9. Metrics of standardised AAPOR result rates. Source: PROTEiCA project survey.

normalisation of protest and the socio-political activation of citizens. To this end, we draw on several key variables from the dataset: P02E: discussing political events with people close to you; P07B: interest in IWD mobilisations; P06: internal political efficacy; P05: responsiveness (i.e., preference for electoral or non-electoral political participation); P11A: prioritisation of gender equality issues.

Additionally, the dataset's innovative rolling cross-section design allows for a unique examination of how citizens' attitudes and opinions evolve before and after key protest events—such as the 2019 International Women's Day mobilisations. For this purpose, the variable PHASE2 is used as a pre/post event indicator. The variables have been recoded to simplify interpretation, without conducting in-depth substantive analysis at this stage. Response categories for P02E, P06, P07B, and P11A were grouped into binary values reflecting either positive (1) or negative (0) attitudes in relation to the concept measured. The P05 variable was recoded as 1 when respondents identified protest as the political behaviour most likely to influence decision-making, and 0 otherwise.

Taken together, the results suggest that following the IWD mobilisations—a mass political event—there is a noticeable increase in both attention to and awareness of gender equality issues, as well as in citizens' perceptions of protest as a legitimate and potentially effective form of political engagement. These findings shown in Fig. 1 point to the event's dual role in reinforcing issue salience and in contributing to the broader normalisation of protest within democratic participation. More broadly, this increase reflects a moment of socio-political activation, where individuals not only pay greater attention to gender equality but also reconsider the efficacy and legitimacy of extra-institutional forms of participation. As such, the survey provides valuable empirical leverage to explore concepts such as normalisation of protest and rise in civic engagement, offering an opportunity to observe how public attitudes shift in direct temporal proximity to a major civic mobilisation.

Through these exploratory analyses, we aim to highlight the potential and value of the dataset for researchers. Additionally, we provide guidance on how to reuse the data effectively, offering insights into various research avenues and methodologies that can be applied to further investigate the dynamics of protest and political engagement.

Variables	p1 vs. p99	p5 vs. p95	p10 vs. p90
P01 Interest *in politics*	2.4222	5.0879	9.5457
P02A Watches TV news bulletins	3.9667	7.4171	7.5250
P02B Watches other political current affairs programmes on TV	10.8825	11.8649*	9.5248
P02C Listens to political news on the radio	6.8580	2.4100	6.0667
P02D Reads political current affairs news in newspapers	2.5524	5.3208	3.7315
P02E Talks about political current affairs with people in their environment	8.2951	7.3476	4.3784
P03 Satisfaction with how democracy works in Spain*	1.8935	1.2311	0.8330
P04Citizens' influence on political decisions	3.2994	6.9468	12.6569*
P05 How citizens can exercise influence on political decisions	2.4000	3.3876	3.5031
P06 Ability to participate actively in political matters	1.3333	2.0211	3.3682
P17 Awareness of the 15 M movement	0.1212	0.7018	3.1841
P18 Political ideology*	0.3406	0.8352	1.7869

Table 10. Early vs. late respondents on key variables. *$p < 0.05$; **$p < 0.001$. Source: PROTEiCA project survey.

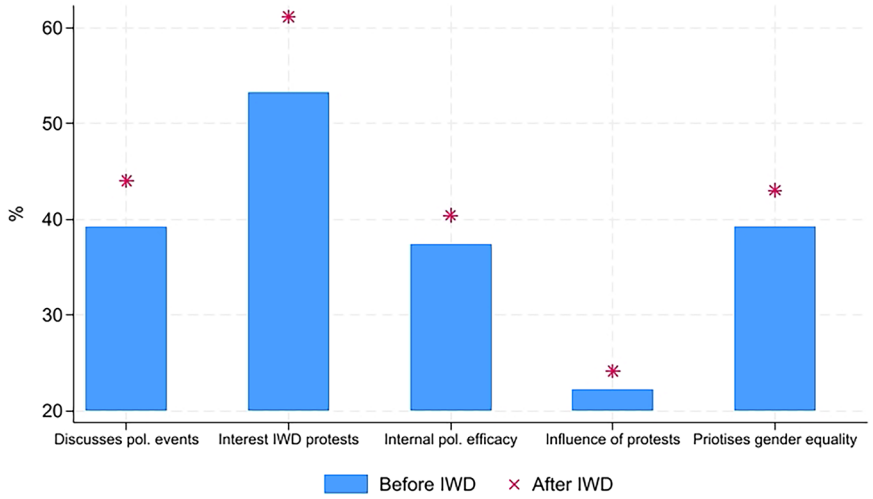

Fig. 1 Pre/post of key political variables from PROTEiCA survey.

Code availability

The dataset was originally processed using Stata 18 software, and the associated files have been uploaded in DTA format. To ensure open access and facilitate reuse across various platforms, including free software, the dataset is also available in CSV format. This dual-format availability ensures that researchers can easily access, analyse, and adapt the data using different statistical tools.

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