

TECHNICAL INFORMATION PROTEiCA Survey

<https://www.upo.es/investiga/dasp/>

Version: 27 - June -2019

Theoretical framework: Persons aged 18 and older residing in Spain.

Sampling frame: Persons aged 18 and older residing in Spain with a mobile phone.

Coverage bias: The sampling frame covers 95%¹ of the theoretical framework.

Sampling: For the sampling process, a Random Digit Dialling (RDD) technique was used, i.e. random dialling between all possible ranges of mobile phone numbers, which is equivalent to simple random sampling applied to the sampling frame.

Questionnaire Administration Mode: CATI-CAWI mixed mode, through a structured questionnaire, guided by the interviewer, with the alternative to do it on the Internet through the Website proteca.net (contacted was established via both modes for a single sample)

Sample size and average interview duration:

Mode	Interviews	Average Duration (minutes)
CATI	1856	12.0
CAWI	294	11.9
CAWI-CATI ²	9	11.7
Sample total	2.159	12.0

Quotas and weighting: A theoretical sample of 100 interviews per day was established for 20 days (Rolling Cross Section Design), controlling for quotas of sex, age, and place of residence.

	Male 18 to 34	Male 35 to 54	Male 55 and over	Female 18 to 34	Female 35 to 54	Female 55 and over	Rural <10,000 inhab.	Urban ≥10,000 inhab.
POPULATION ³	11.4%	19.6%	17.5%	11.1%	19.3%	21.0%	20.7%	79.3%
25 February 2019	11	26	20	9	24	10	24	76
26 February 2019	13	23	18	12	21	24	24	87
27 February 2019	13	28	18	8	20	16	20	83
28 February 2019	12	25	17	15	23	16	16	92
01 March 2019	12	22	18	12	21	18	23	80
02 March 2019	13	25	18	14	24	13	22	85
03 March 2019	15	25	21	10	25	14	21	89
04 March 2019	14	25	18	15	17	20	22	87
05 March 2019	12	22	20	11	23	20	21	87
06 March 2019	12	25	23	8	21	16	14	91
07 March 2019	14	28	20	16	22	22	27	95
08 March 2019	13	30	20	11	22	19	18	97
09 March 2019	13	27	15	14	23	15	20	87
10 March 2019	10	26	21	10	28	13	23	85
11 March 2019	13	26	18	13	20	17	21	86
12 March 2019	13	22	19	13	22	14	20	83
13 March 2019	12	23	18	13	22	15	19	84
14 March 2019	13	22	20	14	23	15	19	88
15 March 2019	13	21	20	12	21	16	20	83
16 March 2019	11	24	14	14	22	16	22	79

¹ Panel de hogares survey, CNMC, 7th wave 2018

² Initiated by CAWI and closed by CATI

³ INE Padrón Continuo census at 01/01/2018

The real daily sample shown in the table above ranged from 100 on 25/02/19 to 122 on 07/03/19 and was weighted with a daily value of 100 for the analysis of daily subsamples by sex and age groups.

For the 8M pre-post analyses (subsamples 25/02 to 07/03 and 08/03 to the end of the field work) and global analysis, the subsamples and global sample were also weighted by sex and age, respectively, as there is a significant deviation in middle-aged men and older women.

Sex	Age	Sample	% Sample	% Population ⁴	Deviation
Male	18 to 34	252	11.7%	11.4%	0.3%
Male	35 to 54	503	23.3%	19.6%	3.7%
Male	55 and over	379	17.6%	17.5%	0.1%
Female	18 to 34	246	11.4%	11.1%	0.3%
Female	35 to 54	450	20.8%	19.3%	1.5%
Female	55 and over	329	15.2%	21.0%	-5.8%

The size of the rural/urban place of residence was naturally self-weighted, because of the reduced coverage bias. There is no significant deviation.

Residence	Sample	% Sample	% Population	Deviation
Rural (<10,000 inhab.)	420	19.5%	20.7%	1.2%
Urban (>= 10,000 inhab.)	1739	80.5%	79.3%	-1.2%

Outcome rates ⁵:

Response rates	Cooperation Rates	Refusal rates	Contact rates
Proportion of sample expected to participate.	Proportion of respondents contacted that participate.	Proportion of the sample that refuses to participate.	Proportion of the sample that was successfully contacted for an interview (regardless of 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		

Sampling errors:

Maximum error for a 95% confidence level considering perfect M.A.S. sampling (100% coverage and RR=1), in the assumed ratio estimate $p=q=50\%$:

Global sample: $\pm 2.1\%$.

8M pre-post subsamples: between $\pm 2.8\%$ (pre) and $\pm 3.2\%$ (post)

Daily subsamples: between $\pm 8.9\%$ (07/03/19) and $\pm 9.8\%$ (25/02/19)

Date of completion: CATI data collected between 25/02/19 and 16/03/19 ⁶

Field Company: HERODATO SL

APPENDIX

FIELD MANAGEMENT, CONTROL, AND INCIDENTS

⁴ INE *Padrón Continuo* census at 01/01/2018

⁵ Standardised AAPOR outcome rates

⁶ For methodological reasons, the CAWI mode is open indefinitely; the data for 8M pre-post and global analysis are closed on 30/05/2019)

The questionnaire was tested by means of a pilot study conducted on 2nd and 8th February, to adjust it to a time of 12 minutes, adequately reword some of the questions, and establish the appropriate size of interviewing team.

A team of 11 interviewers was assembled, and on account of the research subject, gender parity (5 men and 6 women) was monitored, and a briefing session was held on 16th February.

As of 25th February, contact was attempted with 12,943⁷ randomly generated mobile phone numbers, and an SMS text message was sent to them: “*Good afternoon, Pablo de Olavide University invites you take part in a survey at www.proteica.net/carta.asp?z=xxx Kind regards.*” A total of 32,476 dialling attempts were made.

SMS message delivery was dosed, with a variable proportion adjusted to the daily dialling capacity of interviewers and their target achievement of at least 100 interviews per day.

Each number that could not be contacted the first time and which was still eligible was called again at a different time slot, calling an average of 3.2 times.

The incidents or final outcome of each number can be seen in the following table:

Final classification	Response Category	Eligible	Frequency	%
Interview carried out	Survey completed	Yes	2.159	16.7%
Quit 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 no reception	No contact	Yes	697	5.4%
Engaged / Busy	No contact	Yes	94	0.7%
Postponed	Other kind of non-response	Yes	1424	11.0%
Foreign / Doesn't speak Spanish	Other kind of non-response	Yes	248	1.9%
Picks up and doesn't speak	Other kind of non-response	Yes	225	1.7%
Hangs up without answering	Other kind of non-response	Yes	205	1.6%
Out of calling plan ⁸	Other kind of non-response	Yes	93	0.7%
Very old / incapacitated	Other kind of non-response	Yes	77	0.6%
Doesn't ring	Not eligible	No	721	5.6%
Company	Not eligible	No	352	2.7%
Number does not exist	Not eligible	No	222	1.7%
Out of order	Not eligible	No	190	1.5%
Restricted calls	Not eligible	No	133	1.0%
Minor	Not eligible	No	133	1.0%
Fax	Not eligible	No	14	0.1%
Lives abroad	Not eligible	No	12	0.1%

Internet interviews have a lower social desirability bias, but because they were self-administered, they were independently audited by 5 students from the Department of Sociology at the Universidad Pablo de Olavide, verifying sex and post code. Following this audit, 2 interviews were cancelled.

⁷ Any numbers to which the SMS message was undelivered and those belonging to business guides were excluded, hence the low incidence of non-eligible lines.

⁸ An “out-of-calling plan” contact was not informed about the research subject, classified as “postponed”, and a further attempt was made to contact over subsequent days, hence that classification has a frequency limited to the last day of CATI (16/03/19)