LORE
Laboratory of
Opinion Research

UNIVERSITY OF GOTHENBURG

Technical report
LORE Citizen
Panel 39 – 2020

Title:
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LORE Citizen Panel 39
2020

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University of Gothenburg

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Introduction

The Citizen Panel

The Citizen Panel (Swedish: Medborgarpanelen – MP) is an online panel survey run by the Laboratory of Opinion Research (LORE), which is a part of the SOM Institute at the University of Gothenburg. Today, LORE is a research infrastructure for collecting data from online questionnaires, mainly for survey experiments and panel studies. An essential part of LORE is also to contribute to methodological development and testing in the area of web surveys. Each survey consists of a number of specific studies as well as a number of more general questions that are not included in a specific study. The design and content of these specific studies vary, but are mostly either survey experiments using random assignment or panel studies that span over several waves of the Citizen Panel.

Citizen Panel 39 (MP39)

- The panel was carried out between Tuesday September 15, 2020 and Monday October 26, 2020.
- Questionnaires were sent to 36,388 panelists of which of which 25,642 started the survey, and 24,591 made a complete response (AAPOR RR5: 68 percent, Gross Participation Rate: 69 percent, Net Participation Rate: 71 percent).
- All in all, there were 9 studies included in Citizen Panel 39. In addition to participating in at least one of these studies, the median respondent was asked to answer 5 general questions.
- Respondents in the panel are recruited with both probability (26 percent) and non-probability (74 percent) based methods.

Fieldwork

Table 1: Field information

Name	Citizen Panel 39 (MP39)
No. of field days	41
Soft launch	Day 1: Tuesday September 15, 13:50, 2020
Main launch	Day 2: Wednesday September 16, 11:00, 2020
Reminder 1[1]	Day 24: Thursday October 8, 16:25, 2020
Reminder 2	Day 29: Tuesday October 13, 14:23, 2020
Reminder 3	Day 36: Tuesday October 20, 10:42, 2020
Field end	Day 42: Monday October 26, 08:56, 2020

Figure 1: Number of responses / cumulative net participation rate (%) by field day

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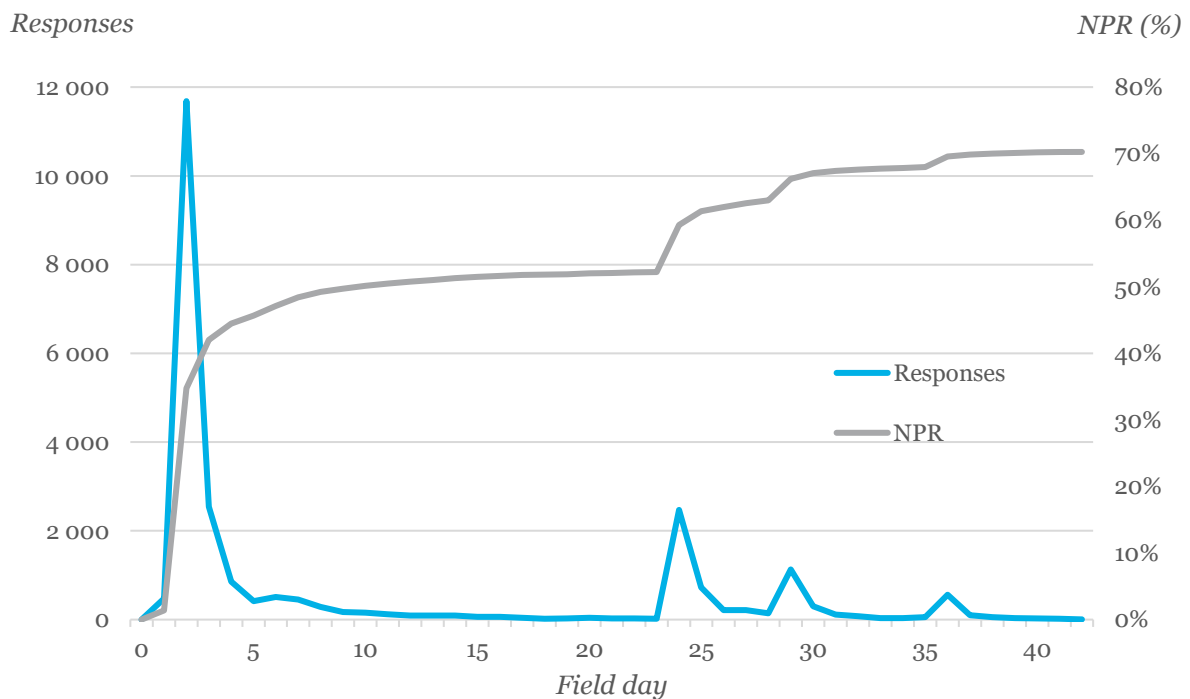
[1] The reminders for this edition of the Citizen Panel were sent out later than usual. This was because of a problem with the email servers at the University of Gothenburg.

Summary, Citizen Panel 39

Table 2: General information, Citizen Panel 39

Gross sample size (GSS)	36,388
Net sample size (NSS)	35,001
E-mail bounce backs or failed deliveries	1,387
Coverage rate/Absorption rate	96%
All responses (complete, partials and break-offs)	25,642
Complete responses; more than 80% item response	24,591
Partial responses; 50%-80% item response	412
Break-offs; less than 50% item response	639
AAPOR RR5	68%
AAPOR RR6 / Gross Participation Rate (GPR)	69%
Net Participation Rate (NPR)	71%
Computer device	44%
Mobile device	49%
Tablet device	7%

Table 3: Detailed information, Citizen Panel 39

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	57.33	67.00	25.39	25,642
Number of item responses	54.82	65.00	26.61	25,642
Item response rate	0.95	1.00	0.14	25,642
Item non-response rate	0.05	0.00	0.14	25,642
Minutes to answer, excluding outliers	8.10	7.42	4.00	23,756
Seconds per item, excluding outliers	8.72	7.59	6.76	23,680
Seconds per item including text-pages, excluding outliers	9.73	8.25	8.98	23,680
Minutes to answer, including outliers	12.17	7.64	84.92	25,606
Seconds per item, including outliers	14.79	7.75	360.27	25,530
Seconds per item including text-pages, including outliers	19.34	8.47	495.73	25,530
Seconds per item, speeders (time-use outliers)	2.96	3.05	0.41	378
Seconds per item, sleepers (time-use outliers)	115.44	18.72	1497.03	1,472

Featured studies

Table 4: Featured studies in Citizen Panel 39

Study:	Title:	Responsible researcher(s):
Study 0	General questions[2]	LORE
Study 1	The liberalizing effect of higher education	Mikael Hjerm
Study 2	Paranormal beliefs	Cristoffer Tidelius
Study 3	Efficiency of transport when returning clothes bought online	Sharon Cullinane
Study 4	Tolerance of hostility towards female politicians	Sandra Håkansson
Study 5	Crisis communication and social trust in a multi-public society (wave 2)	KRISAMS
Study 6	Expectations and evaluations of party behaviour	Ann-Kristin Kölln
Study 7	Respondents' attitudes towards legumes	Annica De Groote
Study 8	Antibiotics without doctor's prescription	Björn Rönnerstrand
Study 9	Measuring participation in events	Sebastian Lundmark & Björn Rönnerstrand

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[2] General questions are variables not directly related to a specific study within the survey. Most of these are updated on a regular basis, often at least twice every year. Background variables like sex and education-level are included in this definition, treated as a sub-category.

Study 0: LORE - General questions

Table 5: General information on Study 0, General questions

Sample type	Probability 26 %
	Non-probability: 74 %
Pre-stratification variables or other selection criteria	
Age-frame	16+
Gross sample size (GSS)	36,388
Net sample size (NSS)	35,001
E-mail bounce backs or failed deliveries	1,387
Coverage rate/Absorption rate	96%
All responses (complete, partials and break-offs)	25,615
Complete responses; more than 80% item response	22,443
Partial responses; 50%-80% item response	2,116
Break-offs; less than 50% item response	1,056
AAPOR RR5	62%
AAPOR RR6 / Gross Participation Rate (GPR)	67%
Net Participation Rate (NPR)	70%
Computer device	44%
Mobile device	49%
Tablet device	7%

Table 6: Detailed information on Study 0, General questions

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	5.46	5.00	0.81	25,615
Number of item responses	5.02	5.00	1.35	25,615
Item response rate	0.92	1.00	0.20	25,615
Item non-response rate	0.08	0.00	0.20	25,615
Minutes to answer, excluding outliers	0.94	0.86	0.45	23,452
Seconds per item, excluding outliers	8.45	7.62	3.95	22,863
Seconds per item including text-pages, excluding outliers	9.07	8.21	4.16	22,870
Minutes to answer, including outliers	2.39	0.89	50.06	25,615
Seconds per item, including outliers	22.09	7.85	1346.71	25,019
Seconds per item including text-pages, including outliers	29.43	8.51	1369.08	25,028
Seconds per item, speeders (time-use outliers)	2.50	2.62	0.38	335
Seconds per item, sleepers (time-use outliers)	196.84	25.06	4989.71	1,821

Study 1: Hjerm - The liberalizing effect of higher education

Table 7: General information on Study 1, The liberalizing effect of higher education

Sample type	Non-probability
Pre-stratification variables or other selection criteria	not initiated college/university studies
Age-frame	19-29
Gross subsample size	1,020
Net subsample size	986
E-mail bounce backs or failed deliveries	34
Coverage rate/Absorption rate	97%
All responses (complete, partials and break-offs)	319
Complete responses; more than 80% item response	310
Partial responses; 50%-80% item response	0
Break-offs; less than 50% item response	9
AAPOR RR5	30%
AAPOR RR6 / Gross Participation Rate (GPR)	30%
Net Participation Rate (NPR)	31%
Computer device	30%
Mobile device	67%
Tablet device	3%

Table 8: Detailed information on Study 1, The liberalizing effect of higher education

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	16.87	17.00	0.62	319
Number of item responses	16.40	17.00	2.59	319
Item response rate	0.97	1.00	0.15	319
Item non-response rate	0.03	0.00	0.15	319
Minutes to answer, excluding outliers	2.60	2.36	1.11	283
Seconds per item, excluding outliers	8.39	7.77	3.29	279
Seconds per item including text-pages, excluding outliers	8.84	7.99	3.66	283
Minutes to answer, including outliers	3.65	2.44	6.07	315
Seconds per item, including outliers	10.93	7.93	17.92	311
Seconds per item including text-pages, including outliers	12.36	8.29	20.24	315
Seconds per item, speeders (time-use outliers)	3.03	3.12	0.50	5
Seconds per item, sleepers (time-use outliers)	38.62	28.14	53.23	27

Study 2: Tidelius – Paranormal beliefs

Table 9: General information on Study 2, Paranormal beliefs

Sample type	Probability
Pre-stratification variables or other selection criteria	sex, edu, age
Age-frame	18-85
Gross subsample size	1,900
Net subsample size	1,825
E-mail bounce backs or failed deliveries	75
Coverage rate/Absorption rate	96%
All responses (complete, partials and break-offs)	1,114
Complete responses; more than 80% item response	1,067
Partial responses; 50%-80% item response	15
Break-offs; less than 50% item response	32
AAPOR RR5	56%
AAPOR RR6 / Gross Participation Rate (GPR)	57%
Net Participation Rate (NPR)	59%
Computer device	43%
Mobile device	50%
Tablet device	7%

Table 10: Detailed information on Study 2, Paranormal beliefs

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	55.97	56.00	0.16	1,114
Number of item responses	53.84	56.00	8.20	1,114
Item response rate	0.96	1.00	0.15	1,114
Item non-response rate	0.04	0.00	0.15	1,114
Minutes to answer, excluding outliers	7.99	7.39	3.25	1,016
Seconds per item, excluding outliers	8.27	7.65	3.09	985
Seconds per item including text-pages, excluding outliers	8.66	7.89	3.66	1,016
Minutes to answer, including outliers	11.38	7.64	55.95	1,113
Seconds per item, including outliers	11.77	7.85	59.56	1,082
Seconds per item including text-pages, including outliers	12.20	8.11	58.89	1,113
Seconds per item, speeders (time-use outliers)	2.99	3.12	0.44	17
Seconds per item, sleepers (time-use outliers)	56.84	21.29	214.91	80

Study 3: Cullinane – Efficiency of transport when returning clothes bought online

Table 11: General information on Study 3, Efficiency of transport when returning clothes bought online

Sample type	Probability
Pre-stratification variables or other selection criteria	sex, edu, age
Age-frame	16-75
Gross subsample size	3,600
Net subsample size	3,444
E-mail bounce backs or failed deliveries	156
Coverage rate/Absorption rate	96%
All responses (complete, partials and break-offs)	2,050
Complete responses; more than 80% item response	1,965
Partial responses; 50%-80% item response	43
Break-offs; less than 50% item response	42
AAPOR RR5	55%
AAPOR RR6 / Gross Participation Rate (GPR)	56%
Net Participation Rate (NPR)	58%
Computer device	40%
Mobile device	54%
Tablet device	6%

Table 12: Detailed information on Study 3, Efficiency of transport when returning clothes bought online

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	40.40	43.00	13.38	2,050
Number of item responses	38.44	37.00	13.76	2,050
Item response rate	0.96	1.00	0.13	2,050
Item non-response rate	0.04	0.00	0.13	2,050
Minutes to answer, excluding outliers	4.70	4.27	2.21	1,889
Seconds per item, excluding outliers	6.81	5.99	5.74	1,888
Seconds per item including text-pages, excluding outliers	7.35	6.44	5.90	1,888
Minutes to answer, including outliers	6.00	4.40	14.05	2,048
Seconds per item, including outliers	8.41	6.10	19.66	2,047
Seconds per item including text-pages, including outliers	9.08	6.62	19.85	2,047
Seconds per item, speeders (time-use outliers)	2.62	2.75	0.43	40
Seconds per item, sleepers (time-use outliers)	35.78	15.80	73.24	119

Study 4: Håkansson - Tolerance of hostility towards female politicians

Table 13: General information on Study 4, Tolerance of hostility towards female politicians

Sample type	Non-probability
Pre-stratification variables or other selection criteria	sex, edu, age
Age-frame	18-85
Gross subsample size	6,300
Net subsample size	5,960
E-mail bounce backs or failed deliveries	340
Coverage rate/Absorption rate	95%
All responses (complete, partials and break-offs)	3,761
Complete responses; more than 80% item response	3,379
Partial responses; 50%-80% item response	266
Break-offs; less than 50% item response	116
AAPOR RR5	54%
AAPOR RR6 / Gross Participation Rate (GPR)	58%
Net Participation Rate (NPR)	61%
Computer device	39%
Mobile device	54%
Tablet device	7%

Table 14: Detailed information on Study 4, Tolerance of hostility towards female politicians

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	17.97	18.00	0.41	3,761
Number of item responses	16.88	18.00	3.10	3,761
Item response rate	0.94	1.00	0.17	3,761
Item non-response rate	0.06	0.00	0.17	3,761
Minutes to answer, excluding outliers	3.70	3.45	1.41	3,421
Seconds per item, excluding outliers	11.31	10.24	6.07	3,404
Seconds per item including text-pages, excluding outliers	12.39	11.13	7.27	3,404
Minutes to answer, including outliers	5.88	3.53	77.38	3,754
Seconds per item, including outliers	21.68	10.47	355.37	3,737
Seconds per item including text-pages, including outliers	23.25	11.40	355.40	3,737
Seconds per item, speeders (time-use outliers)	4.52	4.73	0.72	80
Seconds per item, sleepers (time-use outliers)	166.65	27.10	1359.81	253

Study 5: KRISAMS - Crisis communication and social trust in a multi-public society (wave 2)

Table 15: General information on Study 5, Crisis communication and social trust in a multi-public society (wave 2)

Sample type	Non-probability
Pre-stratification variables or other selection criteria	KRISAMS panelists
Age-frame	16+
Gross subsample size	11,013
Net subsample size	10,929
E-mail bounce backs or failed deliveries	84
Coverage rate/Absorption rate	99%
All responses (complete, partials and break-offs)	10,226
Complete responses; more than 80% item response	10,162
Partial responses; 50%-80% item response	23
Break-offs; less than 50% item response	41
AAPOR RR5	92%
AAPOR RR6 / Gross Participation Rate (GPR)	92%
Net Participation Rate (NPR)	93%
Computer device	48%
Mobile device	45%
Tablet device	7%

Table 16: Detailed information on Study 5, Crisis communication and social trust in a multi-public society (wave 2)

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	63.17	63.00	1.46	10,226
Number of item responses	62.41	62.00	4.08	10,226
Item response rate	0.99	1.00	0.06	10,226
Item non-response rate	0.01	0.00	0.06	10,226
Minutes to answer, excluding outliers	8.19	7.53	3.05	9,396
Seconds per item, excluding outliers	7.26	6.70	2.67	9,389
Seconds per item including text-pages, excluding outliers	7.70	7.06	2.91	9,389
Minutes to answer, including outliers	10.81	7.71	44.75	10,222
Seconds per item, including outliers	9.36	6.84	41.16	10,215
Seconds per item including text-pages, including outliers	10.16	7.22	42.32	10,215
Seconds per item, speeders (time-use outliers)	3.02	3.07	0.29	187
Seconds per item, sleepers (time-use outliers)	42.07	19.10	160.85	639

Study 6: Kölln - Expectations and evaluations of party behaviour

Table 17: General information on Study 6, Expectations and evaluations of party behaviour

Sample type	Probability
Pre-stratification variables or other selection criteria	sex, edu, age
Age-frame	18-85
Gross subsample size	6,600
Net subsample size	6,326
E-mail bounce backs or failed deliveries	274
Coverage rate/Absorption rate	96%
All responses (complete, partials and break-offs)	3,803
Complete responses; more than 80% item response	3,568
Partial responses; 50%-80% item response	9
Break-offs; less than 50% item response	226
AAPOR RR5	54%
AAPOR RR6 / Gross Participation Rate (GPR)	54%
Net Participation Rate (NPR)	57%
Computer device	43%
Mobile device	51%
Tablet device	6%

Table 18: Detailed information on Study 6, Expectations and evaluations of party behaviour

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	24.95	25.00	0.21	3,803
Number of item responses	23.51	25.00	5.44	3,803
Item response rate	0.94	1.00	0.22	3,803
Item non-response rate	0.06	0.00	0.22	3,803
Minutes to answer, excluding outliers	5.24	4.78	2.31	3,450
Seconds per item, excluding outliers	10.60	9.21	5.52	3,441
Seconds per item including text-pages, excluding outliers	13.70	11.51	14.15	3,450
Minutes to answer, including outliers	6.84	4.91	14.93	3,762
Seconds per item, including outliers	13.79	9.41	39.28	3,753
Seconds per item including text-pages, including outliers	17.80	11.88	43.96	3,762
Seconds per item, speeders (time-use outliers)	3.29	3.44	0.51	74
Seconds per item, sleepers (time-use outliers)	63.11	27.81	146.17	238

Study 7: De Groote - Respondents' attitudes towards legumes

Table 19: General information on Study 7, Respondents' attitudes towards legumes

Sample type	Non-probability
Pre-stratification variables or other selection criteria	sex, edu, age, region
Age-frame	18-85
Gross subsample size	4,500
Net subsample size	4,269
E-mail bounce backs or failed deliveries	231
Coverage rate/Absorption rate	95%
All responses (complete, partials and break-offs)	2,677
Complete responses; more than 80% item response	2,527
Partial responses; 50%-80% item response	28
Break-offs; less than 50% item response	122
AAPOR RR5	56%
AAPOR RR6 / Gross Participation Rate (GPR)	57%
Net Participation Rate (NPR)	60%
Computer device	40%
Mobile device	54%
Tablet device	6%

Table 20: Detailed information on Study 7, Respondents' attitudes towards legumes

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	101.00	101.00	0.00	2,677
Number of item responses	96.55	101.00	17.86	2,677
Item response rate	0.96	1.00	0.18	2,677
Item non-response rate	0.04	0.00	0.18	2,677
Minutes to answer, excluding outliers	11.11	10.48	4.23	2,448
Seconds per item, excluding outliers	6.13	5.74	2.14	2,443
Seconds per item including text-pages, excluding outliers	6.91	6.30	3.28	2,443
Minutes to answer, including outliers	15.08	10.61	114.11	2,664
Seconds per item, including outliers	8.42	5.82	67.28	2,659
Seconds per item including text-pages, including outliers	10.27	6.37	79.68	2,659
Seconds per item, speeders (time-use outliers)	2.49	2.73	0.57	75
Seconds per item, sleepers (time-use outliers)	51.20	16.35	289.69	141

Study 8: Rönnerstrand - Antibiotics without doctor's prescription

Table 21: General information on Study 8, Antibiotics without doctor's prescription

Sample type	Non-probability
Pre-stratification variables or other selection criteria	sex, edu, age
Age-frame	18-85
Gross subsample size	7,200
Net subsample size	6,797
E-mail bounce backs or failed deliveries	403
Coverage rate/Absorption rate	94%
All responses (complete, partials and break-offs)	4,243
Complete responses; more than 80% item response	4,098
Partial responses; 50%-80% item response	99
Break-offs; less than 50% item response	46
AAPOR RR5	57%
AAPOR RR6 / Gross Participation Rate (GPR)	58%
Net Participation Rate (NPR)	62%
Computer device	41%
Mobile device	53%
Tablet device	6%

Table 22: Detailed information on Study 8, Antibiotics without doctor's prescription

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	19.53	19.00	1.95	4,243
Number of item responses	18.32	18.00	2.75	4,243
Item response rate	0.94	0.95	0.10	4,243
Item non-response rate	0.06	0.05	0.10	4,243
Minutes to answer, excluding outliers	3.21	2.98	1.20	3,864
Seconds per item, excluding outliers	9.05	8.39	3.25	3,830
Seconds per item including text-pages, excluding outliers	9.50	8.77	3.51	3,864
Minutes to answer, including outliers	5.93	3.05	93.79	4,218
Seconds per item, including outliers	16.95	8.60	283.14	4,182
Seconds per item including text-pages, including outliers	17.65	9.00	281.95	4,218
Seconds per item, speeders (time-use outliers)	3.74	3.85	0.32	77
Seconds per item, sleepers (time-use outliers)	130.66	24.01	1099.67	275

Study 9: Lundmark & Rönnerstrand - Measuring participation in events

Table 23: General information on Study 9, Measuring participation in events

Sample type	Non-probability
Pre-stratification variables or other selection criteria	residents of Gothenburg
Age-frame	18+
Gross subsample size	1,600
Net subsample size	1,543
E-mail bounce backs or failed deliveries	57
Coverage rate/Absorption rate	96%
All responses (complete, partials and break-offs)	1,169
Complete responses; more than 80% item response	1,165
Partial responses; 50%-80% item response	1
Break-offs; less than 50% item response	3
AAPOR RR5	73%
AAPOR RR6 / Gross Participation Rate (GPR)	73%
Net Participation Rate (NPR)	76%
Computer device	44%
Mobile device	48%
Tablet device	8%

Table 24: Detailed information on Study 9, Measuring participation in events

	Mean	Median	Std. Dev.	N.
Number of received/applicable items	5.00	5.00	0.00	1,169
Number of item responses	4.98	5.00	0.23	1,169
Item response rate	1.00	1.00	0.05	1,169
Item non-response rate	0.00	0.00	0.05	1,169
Minutes to answer, excluding outliers	0.43	0.40	0.16	1,083
Seconds per item, excluding outliers	1.22	1.13	0.47	1,083
Seconds per item including text-pages, excluding outliers	1.22	1.13	0.47	1,083
Minutes to answer, including outliers	0.57	0.41	2.82	1,169
Seconds per item, including outliers	1.63	1.14	8.44	1,169
Seconds per item including text-pages, including outliers	1.63	1.14	8.44	1,169
Seconds per item, speeders (time-use outliers)	0.42	0.44	0.05	24
Seconds per item, sleepers (time-use outliers)	9.24	3.45	36.02	62

Glossary

AAPOR participation rate (RR5):	AAPOR Standard Definitions 2011 participation rate measure excluding partial responses (partials are defined as response with over 20 and less than 50 percent item nonresponse; calculation: RR5=(responses-partials)/GSS).
Background variables	Includes questions related to demographic or basic socio-economic factors such as age, education, household etc. These are regularly updated.
Break-offs	Type of nonresponse. Defined as responses with more than 50 percent item nonresponse, used when calculating AAPOR RR5.
Coverage rate/Absorption rate	The quotient of net and gross sample size (coverage=NSS/GSS). Coverage and absorption rate are synonyms describing this relation.
Date of reminders	Reminders are sent by email to those in the sample who have not yet completed the survey.
E-mail bounce backs	Due to automatic spam filters and similar services, or incorrect e-mail addresses, certain e-mails may result in a bounce back, i.e. a non-contact. Includes booth "hard" and "soft" bounce backs.
Field period	The field period is the time passed between the first and the last field day.
General variables (Study 0)	General variables are the variables that are not related to a specific study within the survey. Most of these are repeated on a regular basis, often at least twice every year. Background variables are included in this definition, treated as a sub-category.
Gross participation rate (GPR)	The quotient of responses and gross sample size (GPR=responses/GSS). Does not exclude partials. Corresponds to AAPOR RR6 and COMR.
Gross sample size (GSS)	Gross sample size is the number of potential participants in the initial sample.
Gross subsample size	Gross subsample size is the number of potential participants assigned to a specific study in the initial sample.
Item non-response rate	Calculated by subtracting the item response rate from one (1-item response rate).
Item response rate	Calculated by dividing the number of item responses with the number of received/applicable items.
Net participation rate (NPR)	The quotient of responses and net sample size (NPR=responses/NSS). Does not exclude partials.
Net sample size (NSS)	Net sample size is the number of potential participants in the initial sample, excluding e-mail bounce backs (NSS=GSS-bounce backs).
Net subsample size	Net subsample size is the number of potential participants assigned to a specific study in the initial sample, excluding e-mail bounce backs within that subsample.
Partial response	Defined as responses with more than 20 and less than 50 percent item nonresponse (less than 80% of the questions answered), used when calculating AAPOR RR5.
Number of received/applicable items	The number of items a respondent who finished the survey received. In case a respondent didn't finish the survey, it is an estimation of how many items the respondent would have received if the respondent finished the survey.
Responses	The number of surveys completed by a participant that are registered on the last field day.
Study	A study is a featured specific study, e.g. an experiment, or a set of panel questions with a specific purpose, or some other kind of specific and delimited study.
Text-pages	Pages in the survey where no questions are asked, i.e. text-only.
Time-use outliers, speeders	A respondent is defined as a speeder if it the mean time-use per question/item is less than the first quartile minus half the interquartile range ($Q1 - 0.5{\times}IQR$).
Time-use outliers, sleepers	A respondent is defined as a sleeper if it the mean time-use per question/item is more than the third quartile plus 1.5 times the interquartile range ($Q3 + 1.5{\times}IQR$).

The Laboratory of Opinion Research (LORE) is an academic web survey center located at the SOM Institute at the University of Gothenburg. The objective of the Laboratory of Opinion Research is to facilitate for scientists to conduct web survey experiments, collect panel data, and to contribute to methodological development. For more information, please contact us at:

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