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**WORKING PAPERS IN
ECONOMIC SOCIOLOGY:**

**Research Report on
Finland in the Digital Age Round 2 Panel -survey**

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1 INTRODUCTION

This is a follow-up report to a previously published release *Finland in the Digital Age Research Report on Finland in the Digital Age -Survey* (for details, see Sivonen *et al.* 2018). The report is attached to the ongoing research project "Political Bubbles and Media".

The survey in question asked the respondents if they would like to join an online panel for follow-up research. In total, 1708 respondents expressed that they are willing to join to the panel, and altogether 1141 answered the follow-up survey.

This report contains information on designing, collecting and finishing the data. The codebook of the survey is presented as an attachment at the end of this report. The report is primarily intended as a guide for the users of the panel data.

2 TECHNICAL OVERVIEW

With Round 1 we refer to the survey that was implemented in turn of the year 2017 and 2018, and Round 2 refers to the 2019-panel survey (see Table 1). The 2019 panel survey was carried out by the unit of Economic Sociology at the University of Turku.

An invitation and link to the survey and four reminders were sent to the respondents via email between February and April of 2019. To prevent overstress of the data system, the 1708 volunteer respondents were divided to four groups, and emails to the potential respondents in these separate groups were sent on different days. The invitation was sent between 25.–28.2.2019, first reminder email between 7.3.–12.3, second reminder between 18.3.–21.3, third reminder between 28.3.–2.4, and fourth reminder between 8.4.–10.4. The last response was received at 18 April 2019.

The original sample of the mail survey 2017–2018 consisted of 8000 respondents and the total number of returned forms was 2470. The response rate was 30.9% (see Sivo-nen *et al.* 2018). In the Round 1 survey, altogether 1708 respondents expressed that they are willing to join to the panel, and 1141 answered the follow-up survey (Round 2). This means that the second Round's response rate is 66.8%. 619 respondents of the panel were originally from the Taloustutkimus-online panel and 522 from the Finland in the digital age-postal survey. The electronic response form of the Round 2 survey was created with Webropol survey tool.

Table 1 Panel formation in Round 2

	Round 2 (Panel 2019)
Respondents	1708
Unanswered	567
Final answer amount	1141

3 REPRESENTATIVENESS OF THE DATA

3.1 Demographic representativeness

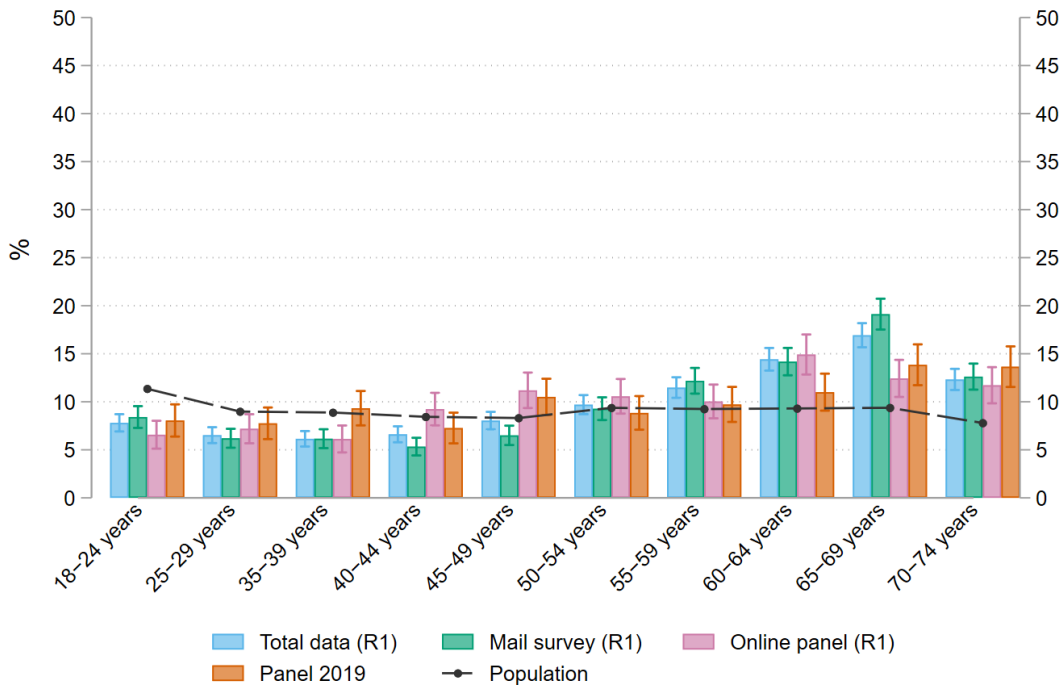


Figure 1 Distribution of age groups in total data, mail survey, online panel, panel 2019 and population. The population information is from 2017 (Statistics Finland 2018). R1 refers to Round 1.

- As figure 1 shows, when comparing the panel data of 2019 to the population, young respondents are underrepresented while older respondents are overrepresented in the data.
- Though, by contrast, the panel data of 2019 is more representative of the public than the data collected earlier. The only exceptions are the age groups of 45–49 and 50–54. These age groups are more represented in the earlier data.

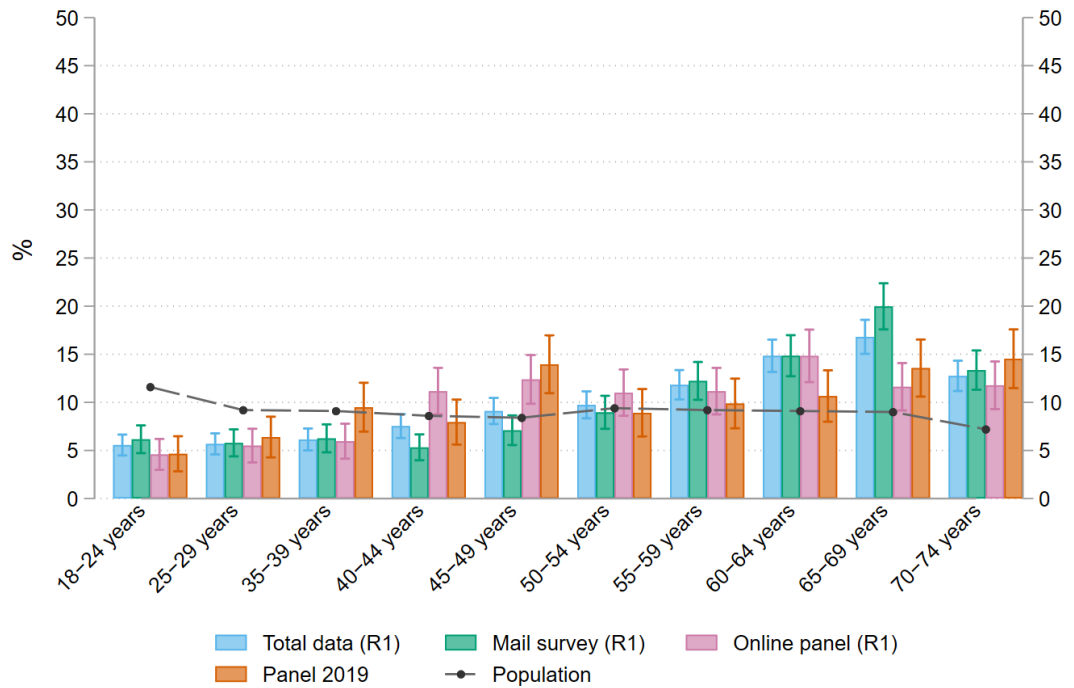


Figure 2 Distribution of men by age group in total data, mail survey, online panel, panel 2019 and population. The population data information is from 2017 (Statistics Finland 2018). R1 refers to Round 1.

- When it comes to the distribution of men by age group, figure 2 illustrates that the panel data of 2019 is more representative of the public than data collected earlier. The only exceptions are groups of 18–24, 45–49 and 70–74, in which the earlier data is more representative of the public.
- Age groups of 18–24 and 25–29 are underrepresented in the panel data of 2019, while age groups of 45–49, 65–69 and 70–74 are clearly overrepresented.

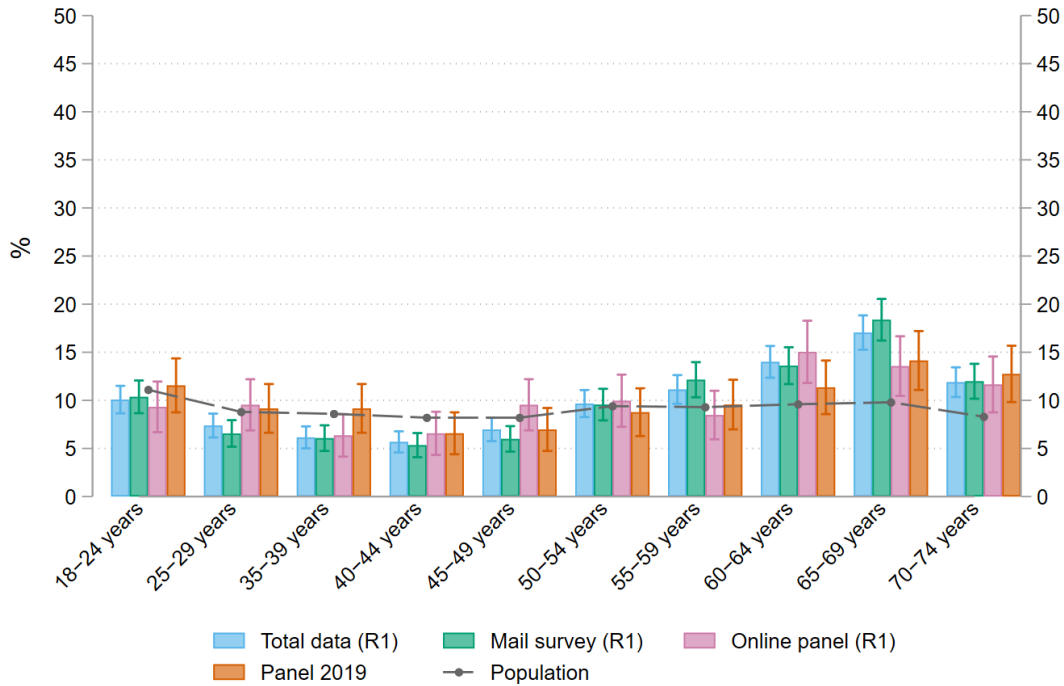


Figure 3 Distribution of women by age group in total data, mail survey, online panel, panel 2019 and population. The population data information is from 2017 (Statistics Finland 2018). R1 refers to Round 1.

- Figure 3 points out that the panel data of 2019 represents all female age groups relatively well.
- The age group of 45–49 is slightly underrepresented, while women older than 60 years old are overrepresented.
- When comparing the 2019 panel data to the earlier data set, 2019 is more representative in all other categories instead the group of 70–74 year old women.

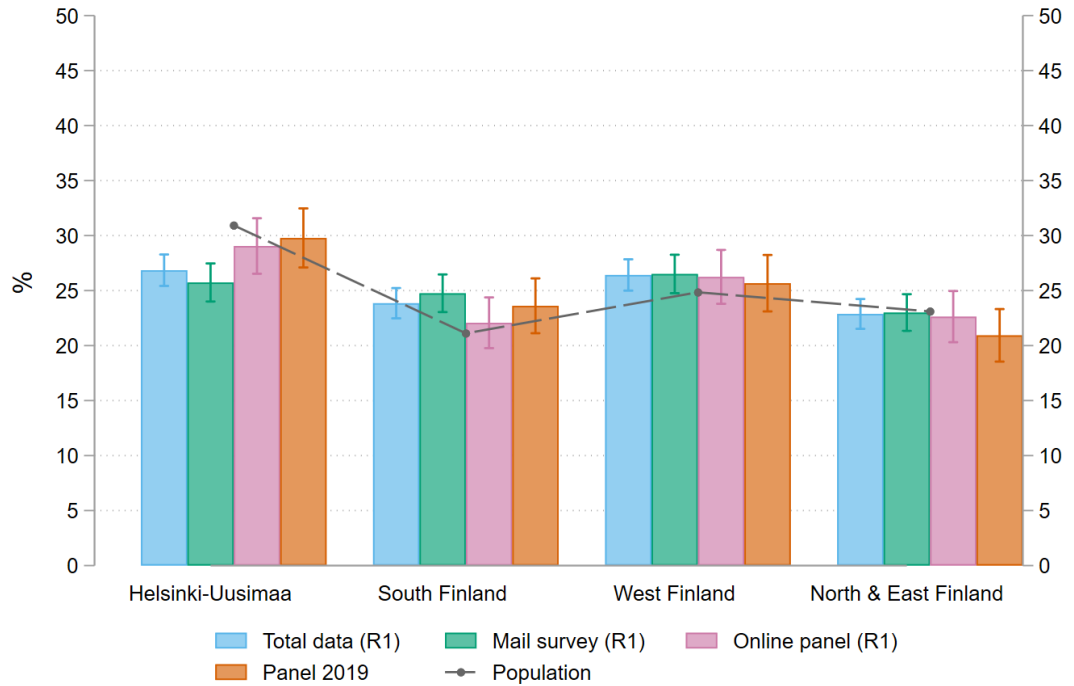


Figure 4 Distribution of NUTS 2 (large areas) statistical region in total data, mail survey, online panel, panel 2019 and population. The population data information is from 2017 (Statistics Finland 2018). R1 refers to Round 1.

- Figure 4 demonstrates that the 2019 panel data compares relatively well with the population for the NUTS 2 areas.
- The 2019 data proportion of South Finland is slightly overrepresented while the North and East Finland proportions of the data are slightly underrepresented.
- The representativeness of the Round 1 and Round 2 data are fairly similar. The Helsinki-Uusimaa region compares better with the population in the 2019 panel data but the North and East Finland proportions are represented slightly worse in the same data set.

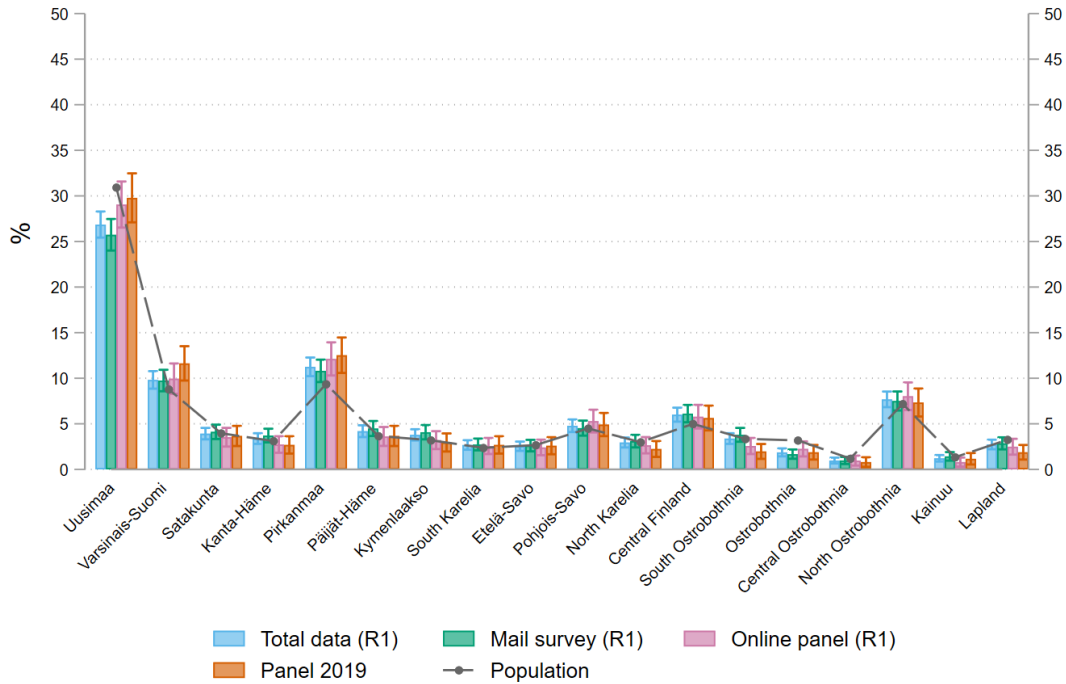
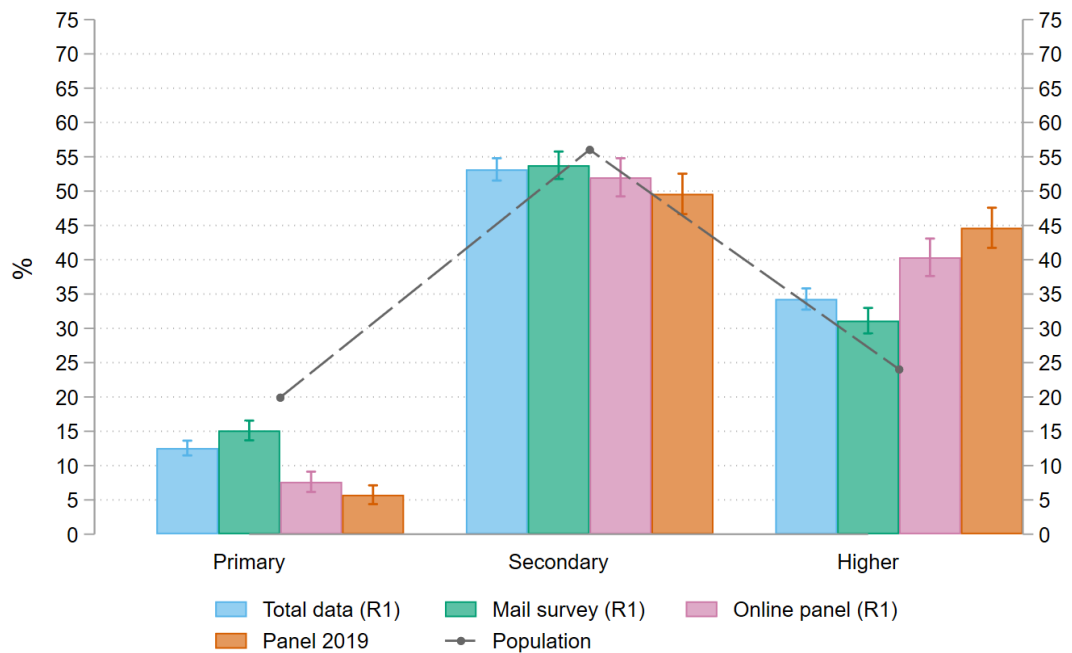


Figure 5 Distribution of provinces in total data, mail survey, online panel, panel 2019 and population. The population information is from 2017 (Statistics Finland 2018). R1 refers to Round 1.

- Both the panel data of 2019 and the earlier data set represent different provinces well, as seen in figure 5.
- Uusimaa is slightly underrepresented, but the 2019 data panel is actually more representative than the data collected earlier.
- Varsinais-Suomi and Pirkanmaa are overrepresented in the data.

3.2 Socioeconomic representativeness



*Population data includes age group 20–74.

Figure 6 Distribution of education in total data, mail survey, online panel, panel 2019 and population. The population information is from 2016 (Statistics Finland 2018). R1 refers to Round 1.

- Figure 6 illustrates that people with higher education are overrepresented in the 2019 panel data. This overrepresentation has considerably increased from the earlier data.
- The proportion of those with secondary education is relatively well represented within the 2019 panel data. It must be noted though, that representativeness has declined compared to the earlier data.
- Similarly, people with primary education are underrepresented in the data when comparing to the population and to the earlier data.

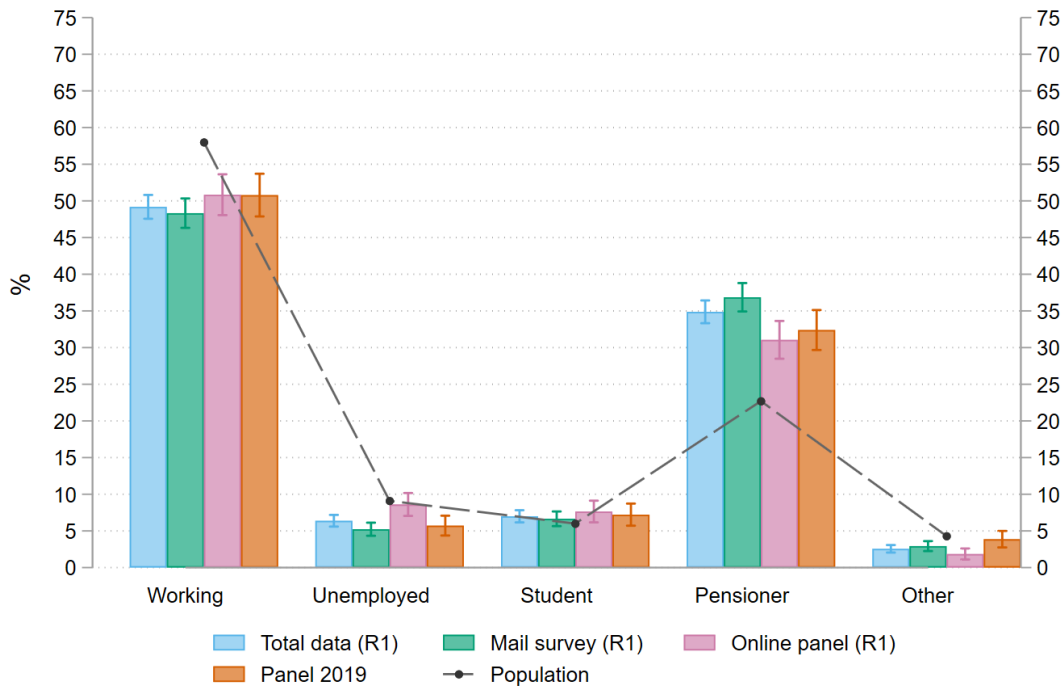


Figure 7 Distribution of main activities in total data, mail survey, online panel, panel 2019 and population. The population information is from 2016 (Statistics Finland 2018). R1 refers to Round 1.

- Figure 7 demonstrates that students and the category “other” are well represented in the 2019 panel data in comparison to the population. Proportions of the groups mentioned above are relatively similar to the earlier data as well.
- Categories of “working” and “unemployed” are underrepresented in the panel data of 2019 as they were included in the earlier data as well.
- Pensioners are distinctly overrepresented in the 2019 panel data similarly as they were included in the earlier data.

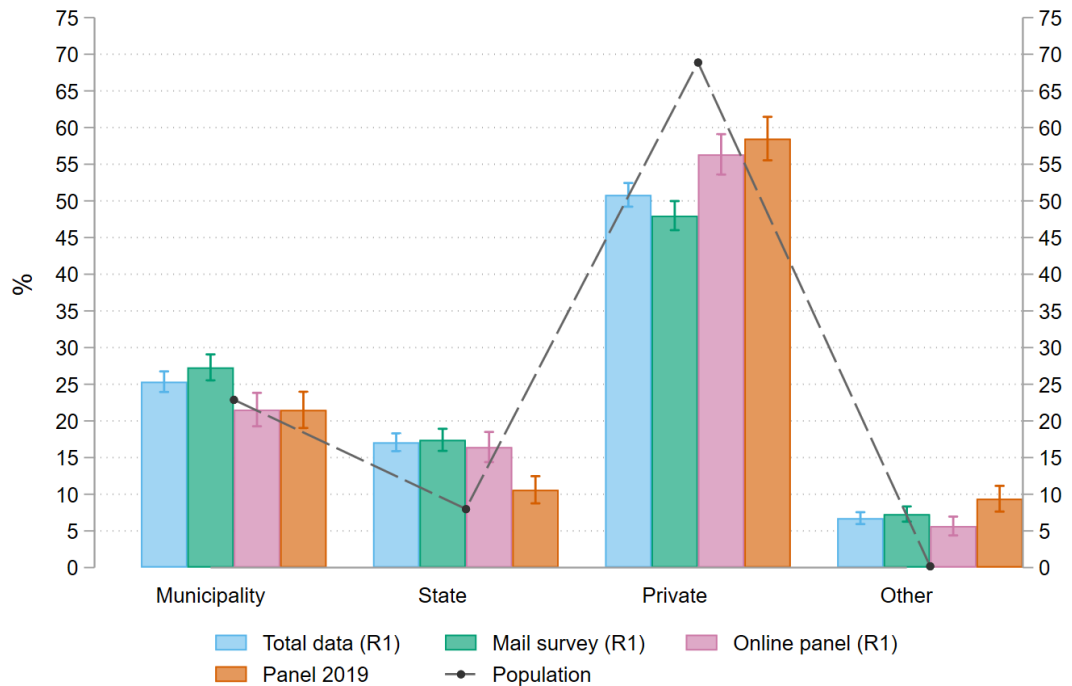
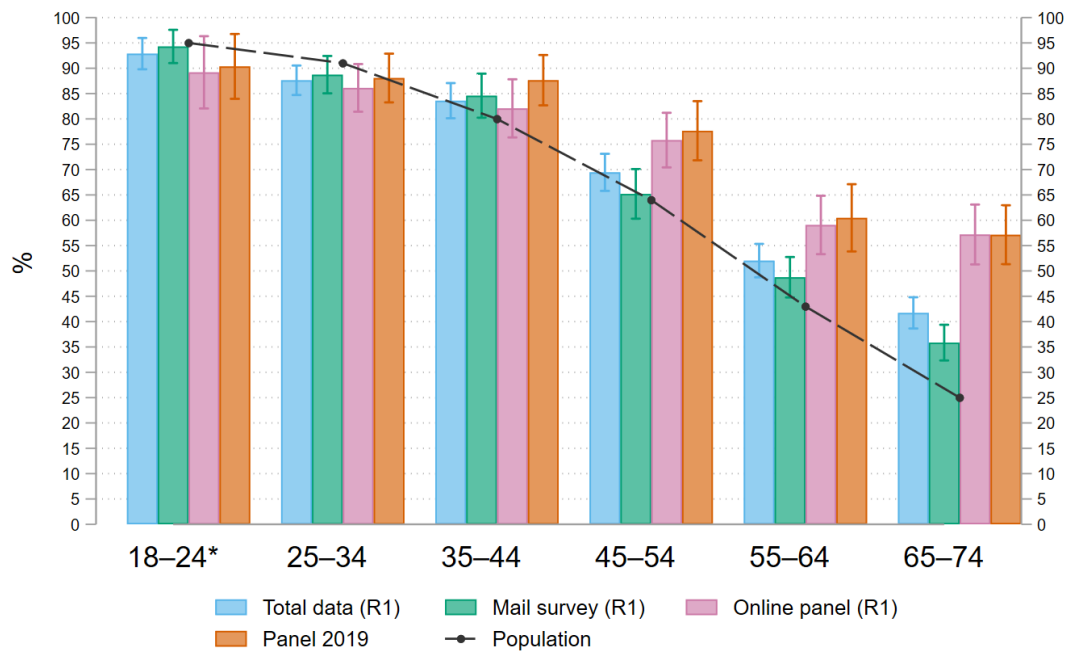


Figure 8 Distribution of employer sectors in total data, mail survey, online panel, panel 2019 and population. The population information is from 2015 (Statistics Finland 2018). R1 refers to Round 1.

- When it comes to the employer sector of the respondents, figure 8 shows that the category “private” is clearly underrepresented. Though, the 2019 panel data is slightly more representative than the earlier data set.
- Employer sector “municipality” is well represented in the 2019 panel data. Again, the 2019 data is slightly more representative than the total data from earlier.
- People who are employed by the state are fairly well represented by the 2019 data. In the case of the earlier data, the employer sector “state” was overrepresented.
- The employer category “other” is overrepresented in the 2019 panel data. The sector is even slightly more overrepresented than it was in the earlier data set.

3.3 Digital representativeness



* Population data includes instead age group 16–24.

Figure 9 Distribution of social media usage by age group in total data, mail survey, online panel, panel 2019 and population. The population information is from 2017 (Statistics Finland 2017). R1 refers to Round 1.

- As figure 9 demonstrates, social media users are overrepresented in the 2019 panel data in all the age groups older than the group of 25–34 year olds. This is similar to the earlier online panel data.
- Age groups of 18–24 and 25–34 are well represented in the 2019 panel data in a similar way as they were in the earlier data.

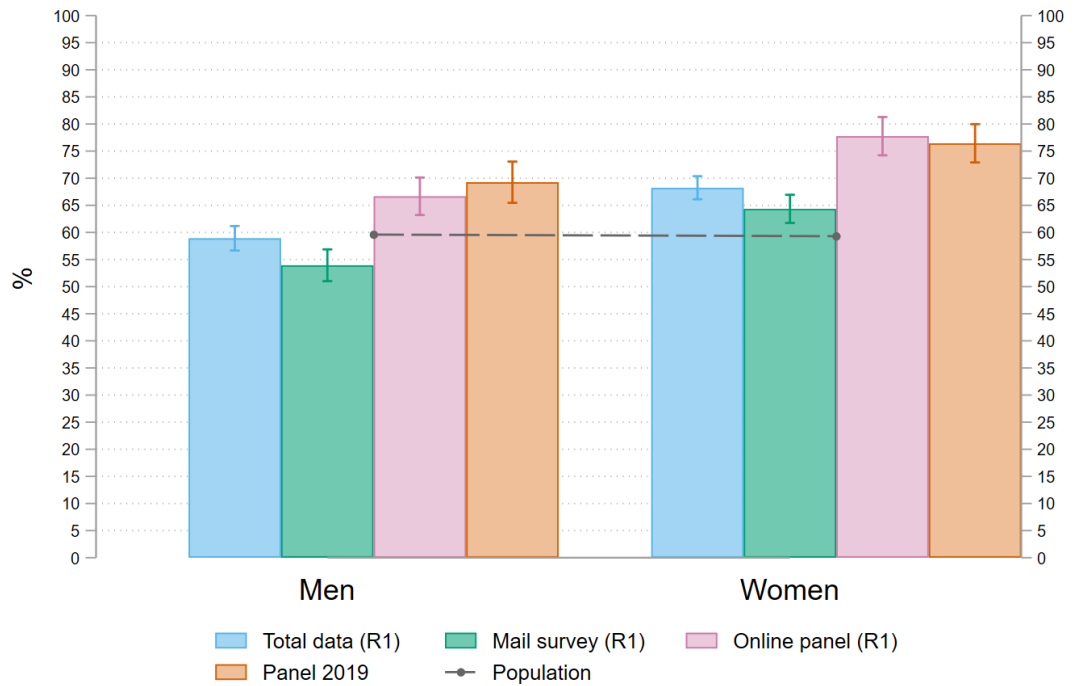
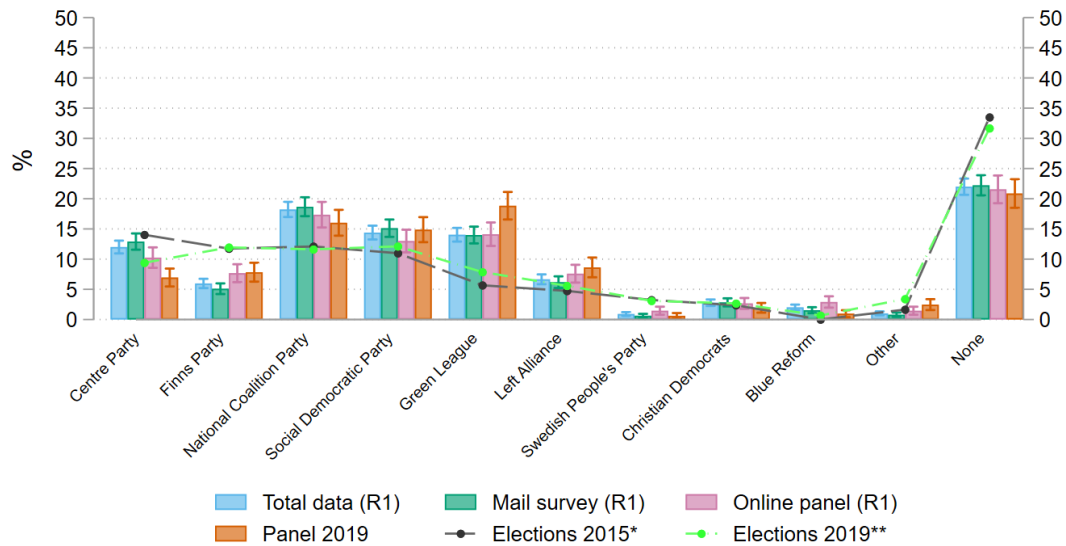


Figure 10 Distribution of social media usage by gender in total data, mail survey, online panel, panel 2019 and population. The population information is from 2017 (Statistics Finland 2017). R1 refers to Round 1.

- When observing the distribution of social media usage by gender, figure 10 points out that both gender groups are overrepresented in the 2019 panel data comparing the total data.
- There is considerably more social media usage with in both groups in the 2019 panel data than in the earlier data set.



*The 'Elections 2015' -line indicates share of the support of parties in the parliamentary elections 2015 when abstainers (category 'None') are included. Party 'Blue Reform' did not exist during the elections.

**The 'Elections 2019' -line indicates share of the support of parties in the parliamentary elections 2019 when abstainers (category 'None') are included.

Figure 11 Distribution of respondents' most important party in total data, mail survey, online panel, panel 2019 and population, and Finnish 2015 and 2019 parliamentary elections results (Statistics Finland 2018). R1 refers to Round 1.

- It is difficult to evaluate party preference of the respondents because a valid reference point does not exist.
- However, figure 11 illustrates that the representativeness of the 2019 panel data is very similar to the earlier data. Even the comparison of 2015 and 2019 elections does not change the overall representativeness. For example, the amount of people who stated their support for the Centre Party in the earlier data set has reduced in a similar relation than the party's electoral success.
- Supporters of the National Coalition Party, Social Democratic Party, Left Alliance and especially supporters of the Green League are overrepresented in the panel data of 2019.
- Though, supporters of the Centre Party, Finns Party and Swedish People's Party are underrepresented in the 2019 panel data.
- Supporters of Christian Democrats, Blue Reform and other parties are fairly well represented in the panel data of 2019.

4 CONCLUSIONS

In the recent surveys, we have noticed how young men are particularly underrepresented (e.g. Koivula *et al.* 2017). Because of better population representativeness, scholars have encouraged scientists to conduct survey research by using various opportunities of the Internet (see Dillman *et al.* 2018). Nevertheless, it seems that the internet is not a very effective solution for improving representativeness. It seems that even if the collection method is internet-based, younger cohorts and younger male cohorts are underrepresented in the data.

Despite this, our technical report indicates that the panel data represent different population groups relatively well. As expected, social media users, people with higher education and pensioners are overrepresented. On the other hand, the data is representing different geographical areas and different female age groups relatively well. If we focus on party supporters, there are some problems in representativeness. Supporters of the National Coalition Party, Social Democratic Party, Left Alliance and especially supporters of the Green League are overrepresented in the panel data of 2019. Additionally, the supporters of the Centre Party, Finns Party and Swedish People's Party are underrepresented in the data.

Even though there may be certain problems with the representativeness of the panel data, we think it still offers a valuable review of the relationship between digitalization and Finnish society. We wish rewarding research moments to the users of the data! We will also make a new panel survey in 2020.

REFERENCES

Dillman, D. A., Smyth, J. D. and L. M. Christian. 2014. *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. 4th ed. New Jersey: Wiley.

Koivula, A., Sirppiniemi R., Koironen I. and J. Oksanen. 2017. *Arkielämä Ja Osallistuminen -Kyselyn Tutkimusseloste*. Workingpapers in Economic Sociology (IX). Turku: University of Turku, Department of Social Research. Available at: <http://www.utupub.fi/handle/10024/143938> (accessed 10 November 2019).

Sivonen, J., Koivula, A., Saarinen, A. and T. Keipi. 2018. *Research report on the Finland in the digital age -survey*. Working Papers in Economic Sociology (XI). Turku: University of Turku, Department of Social Research. Available at: <https://www.utupub.fi/handle/10024/145293> (accessed 2 November 2019).

Statistics Finland. 2017. 'Väestön Tieto- Ja Viestintätekniiikan Käyttö 2017'. <https://www.stat.fi/til/sutivi/2017/index.html> (May 15, 2018).

Statistics Finland. 2018. 'Statistics Finland's PX-Web Databases : Statfin'. <http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/?rxid=99142dcd-2c78-437d-8172-6a68fbadccfa> (May 15, 2018).

APPENDIX 1 CODEBOOK

This section includes a codebook for all variables from the mail survey (paper questionnaire, online questionnaire, online panel and panel data survey). In addition to variable information, we present descriptive statistics for each variable with missing values.

If information about missing value is absent, the question was not asked on that round.

Variable	Question/Definition	Value and label	Mail survey, missing (%)	On-line panel, missing (%)	2019 panel, missing (%)
aineisto	Data source	<p>1 = Mail survey, paper questionnaire</p> <p>2 = Mail survey, online questionnaire</p> <p>3 = Taloustutkimus online panel</p> <p>4. Panel data round 2</p>			
aineisto2	Data source	<p>1 = Mail survey (paper and online questionnaire)</p> <p>2 = Taloustutkimus online panel</p> <p>3 = Panel data round 2</p>			

q1	Gender 1 = Male 2 = Female 3 = Other	0,53	0	0,96
q2	Birth year	0,53	0	0,87
q3	Postal code	0,73	0,64	0,87
q3_1	Municipality code	0,73	0,64	2,1
q3_2	Municipality group number	0,73	0,64	2,1
q3_3	Sub-region number	0,73	0,64	2,1
q3_4	Province	0,73	0,64	2,1
q3_5	NUTS 2 region	0,73	0,64	2,19
q4	Are you in a relationship? 1 = Yes 2 = No	1,54	1,75	2,19
q5_a	Number of adults in the household	3,52	1,91	1,14
q5_b	Number of minors in the household	3	3,99	1,14
q6	What is your highest level of education achieved? 1 = Primary school	2,87	0,72	0,7

		2 = Vocational school			
		3 = Secondary school			
		4 = College			
		5 = Degree in applied sciences			
		6 = University degree			
		7 = Doctoral or licentiate degree			
		8 = Other			
q6_b	Other education reported by the respondent				
q7	Field of highest degree achieved?		35,1	19,38	18,55
q8	What is your main activity?		3,24	0,88	0,61
		1 = Salary work/on leave			
		2 = Entrepreneur			
		3 = Unemployed/seeking employment			

		4 = Retired			
		5 = Student			
		6 = Other, what			
q9_isco			18,8	13,28	12,16
q10	What is your sector of employment?		18,14	8,53	6,82
		1. Municipality			
		2. State			
		3. Private			
		4. Third sector			
		5. Other			
q10_b	Other sector of employment reported by the respondent				
q11a - q11_s	How often do you do the following?				
	a) Use the Internet	1 = Never	1,46	0,48	0,44
	b) Watch television	2 = Less than weekly	1,09	0,16	1,4
	c) Read print media in the form of news or periodicals	3 = Weekly	2,71	0,16	2,01

d) Read online news or periodicals	4 = Daily	2,67	0,56	1,22
e) Follow political or societal news in traditional media (for example television, newspapers, radio)	5 = Many times per day	0,93	0,32	0,52
f) Listen to radio programs or podcasts		1,42	0,4	0,44
g) Listen to music		1,66	0,96	
h) Watch movies or television programs		1,21	0,48	
i) Watch sports		2,31	0,96	
j) Watch adult entertainment		1,9	0,8	
k) Read blogs		1,86	0,48	1,57
l) Comment on blogs		1,54	0,16	0,61
m) Spend time on chat forums		1,86	0,8	1,14
n) Write in chat forums		1,62	0,4	0,52

	o) Spend time on social media platforms (Facebook, Twitter, etc)	1,38	0,16	0,79
	p) Participate in discussions on social media platforms	2,23	0,32	1,14
	q) Use instant messenger applications (WhatsApp, Facebook messenger, etc)	1,9	0,48	1,14
	r) Comment on news on online news sites	1,58	0,48	1,14
	s) Read the comments of others on news sites	1,34	0,24	0,52
q12_a - q12_h	How interested are you in the following forms of news?			

	a) Entertainment news	1 = Not at all interested	1,54	0,4	0,61
	b) Sports news	...	1,09	0,16	0,7
	c) Arts and cultural news	5 = Very interested	2,06	0,48	1,49
	d) News related to well being		1,74	0,4	0,61
	e) International news		1,66	0,24	0,79
	f) Political news		1,46	0,16	0,52
	g) Economic news		1,21	0,24	0,87
	h) Science news		1,24	0,24	0,52
q13_a - q13_g	Which of the following best describes the importance of the following devices in your daily life?				
	a) Smartphone	1 = Do not use	1,17	0,08	0,7
	b) Computer	2 = I use it, but not necessity	1,9	0,72	0,7
	c) Tablet computer (Ipad, for example)	3 = I use it and it is necessity	2,83	0,48	0,7

	d) Home internet connection (DSL, etc)		1,78	0,16	0,79
	e) Internet on a mobile device		2,47	0,64	1,14
	f) Smartwatch or wrist computer		1,7	0,24	0,87
	g) Sports/activity tracker		1,74	0,16	0,87
q14_a - q14_n	To what extent do the following Internet activities describe you?				
	a) I know how to download and save files from the Internet (For example, pictures)	1= Not at all	8,06	0,16	
	b) I know how to upload files to online platforms (For example, Facebook or Dropbox)	2 = Very little	8,06	0	

c) I know how to adjust my browser's privacy settings	3 = Somewhat	8,18	0,24
d) I know how to connect devices to wireless Internet	4 = Well	8,62	0,16
e) It is easy for me to determine appropriate search terms when looking for something online	5 = Very well	8,14	0,24
f) I can easily find my past Internet history		7,94	0,32
g) I know how to use private browsing settings online (For example, incognito mode)		8,3	0,32
h) I know how to delete my online browsing history		7,98	0,64

i) I know how to turn my location services on and off	8,74	0,48
j) I know how to edit existing images and video	7,89	0,16
k) I know how copy-write limits the use of online content	8,06	0,72
l) I know what programs and files are save to download	8,02	0,24
m) I understand the costs of using mobile applications	8,22	0,24
n) I know how to download and install applications to my mobile device	8,1	0,4

q15_a - Have you used the following services?
q15_e

	a) Ruokakassi (food bag) -transfer service	1 = Never	7,25	0,32
	b) Airbnb	2 = Less than Weekly	7,53	0,32
	c) Wolt	3 = Weekly	7,57	0,48
	d) Foodora		7,37	0,48
	e) Uber		7,85	0,56
q16_a - q16_s	To what extent do you feel that the INTERNET is important in carrying out the following			
	a) Banking	1 = Not at all important	7,13	0,64
	b) Reservations/appointments (Medical, for example)	2 = Not very important	7,61	0,72
	c) Keeping up with the news	3 = Somewhat important	8,3	0,72
	d) Research on health or sickness	4 = Quite important	7,49	0,32
	e) Research on goods and services	5 = Extremely important	7,53	0,16

f) Purchasing services	7,53	0,24
g) Purchasing travel and lodging services	7,65	0,32
h) Clothing purchases	7,41	0,32
i) Purchasing new products	7,53	0,4
j) Purchasing used products	7,61	0,24
k) Selling of personal products or services	7,69	0,32
l) Keeping in contract with other people	7,45	0,4
m) Playing games	7,77	0,56
n) Listening to music	7,57	0,32
o) Watching sports	8,14	0,96
p) Watching movies or television programs	7,69	0,48

	q) Watching adult entertainment		7,69	0,48	
	r) Consuming other art or culture		7,57	0,4	
	s) Giving customer feedback		7,41	0,4	
q17_a - q17_e	What is your opinion on the following statements?				
	a) I want to use various Internet sources to search for information on subjects that I am interested in	1 = Completely disagree	7,53	0,8	0,35
	b) I always make sure that what I share on the Internet is trustworthy/accurate	...	8,1	0,08	0,61

c) I prefer to search for information from sites where the writer's points of view are in line with my own	3 = Do not agree or disagree	7,89	0,32	0,87
d) When searching for information online, I trust my friends on social media most	...	7,85	0,32	0,52
e) Seeking out accurate/trustworthy information online requires significant effort	5 = Completely agree	7,61	0,16	0,7

q18_a -
q18_s

What do you think about the following statements? I use social media in order to...

a) receive completely new information	1 = Completely disagree	27,25	19,38	15,22
b) receive more information on things I already know about	...	27,33	19,46	15,14
c) get followers	3 = Do not disagree or agree	27,73	19,46	16,1
d) share useful information with others	...	27,65	19,54	15,49
e) express my societal opinions	5 = Completely agree	27,25	19,46	15,49
f) comment on and share news		27,33	19,38	15,57
g) participate in the activities of a particular online group		27,29	19,54	15,75
h) affect the opinions of others		27,37	19,38	15,66
i) participate in an activist group		27,69	19,38	16,19

j) keep in touch with people I already know	27,13	19,38	15,66
k) get to know new people	27,33	19,7	15,92
l) tell others about my life and how I am doing	27,25	19,54	15,49
m) network with other users	27,73	19,86	15,75
n) entertain myself	27,25	19,7	15,4
o) entertain my friends and acquaintances	27,49	19,7	15,92
p) receive positive feedback	27,49	19,78	15,57
q) receive economic benefit/income	27,49	19,54	15,66
r) follow various celebrities	27,17	19,7	15,49
s) follow political figures	27,25	19,78	15,57

q19_a - q19_d	To what extent do the following describe your activity?	1 = Not at all			
	a) I know what is appropriate to share online	2 = Very little	27,17	19,46	15,4
	b) I know when it is appropriate to share online	3 = Somewhat	27,29	19,54	15,4
	c) I know with whom it is appropriate to share personal information online	4 = Well	27,49	19,46	15,92
	d) I know how to remove friends and followers from social networking services	5 = Very well	27,49	19,54	15,75
q20_a - q20_f	To what extent do the following describe your social media activity?				

a) I belong to social media communities or groups that are an important part of me	1 = Not at all	27,65	19,54	15,22
b) I belong to social media communities or groups that I am proud of	...	27,57	19,38	15,31
c) In my experience, other people on social media share my point of view	7 = Completely	27,81	19,54	15,49
d) On social media, I interact only with people with whom I share similar interests		27,69	19,54	15,49
e) I trust information that is shared with me on social media		27,89	19,3	15,4

	f) I interact exclusively with people who are like me on social media		27,73	19,54	15,66
q21_a - q21_j	What do you think of the following statements?				
	a)) I have hidden content that conflicts with my points of view on social media	1 = Completely disagree	28,06	19,46	15,4
	b) I purposefully share material on social media that I believe will provoke others	...	28,06	19,3	15,49
	c) I do not "like" others' posts if I do not agree with them	3 = Do not disagree or agree	28,34	19,46	15,75

d) I very often “like” other users’ posts in order to show support and empathy	...	28,14	19,46	15,66
e) The fear of offending others limits my posting of my opinions on social media	5 = Completely agree	28,1	19,46	15,57
f) I try to give others on social media an improved image of who I am		28,22	19,54	15,57
g) I have hidden or removed annoying or bothersome users on social media		28,26	19,62	15,66
h) I comments on others’ posts on social media even when I disagree with them		28,18	19,38	15,57

	i) I avoid sharing content on social media that I feel could lead to disputes	28,18	19,54	16,19
	j) Over the last year, I have tried to reduce my use of social media			15,84
<p>You answered that you have tried to reduce your use of social media over the last year. How significant were following factors regarding your reduction?</p>				
q21_j_1 - q21_j_9	a) My distrust towards social media providers	1= Not at all important		76,73
	b) The increase of disturbing communication in social media	...		76,73

c) My boredom towards the use of social media	5 = Very important	76,73
d) The use of social media takes too much of my time		76,82
e) Social media weakens my concentration		77,25
f) Some of my friends or acquaintances have left social media		76,82
g) Electoral influencing happening in social media concerns me		76,73
h) Weakening of my privacy in social media concerns me		76,73

	i) Information security of social media platforms concerns me				76,73
q22_a - q22_e	How often...				
	a) do you have difficulty in stopping social media use?	1 = Never	27,69	19,38	15,75
	b) have other people said you should use social media less?	2 = Less than weekly	27,89	19,3	15,57
	c) Have you left important work, school or family related things undone due to social media use?	3 = Weekly	27,85	19,38	15,4
	d) do you use social media to alleviate feeling bad or stress?	4 = Daily	27,89	19,3	15,66

	e) do you plan your social media use beforehand?		27,89	19,62	15,57
q23_a - q23_k_2	How often do you use the following social media services?				
	a) Facebook	1 = Never	27,85	19,7	15,14
	b) Twitter	2 = Less than weekly	28,58	19,54	15,57
	c) Instagram	3 = Weekly	28,91	19,62	16,1
	d) Snapchat	4 = Daily	29,23	19,94	16,01
	e) YouTube	5 = Many hours per day	28,14	19,62	15,4
	f) LinkedIn		28,79	19,54	16,1
	g) Pinterest		28,95	19,86	16,27
	h) Facebook Messenger		28,66	19,78	15,66
	i) WhatsApp		27,85	19,86	15,49
	j) Jodel		28,79	19,62	15,84
	k) Vimeo		28,79	19,86	
	k_2) Tinder				15,84

q24_a - q24_g	If you use the following social media services, how many friends or followers do you have?				
	a) Facebook	49,55	35,96	36,66	
	b) Twitter	89,51	59,89	83,73	
	c) Instagram	76,03	56,06	67,98	
	d) Snapchat	87,69	63,56	91,51	
	e) LinkedIn	87,49	58,05	81,37	
	f) Pinterest	92,11	65,07	94,14	
	g) Other platforms altogether	90,61	63,32	89,33	
q25_a - q25_n	How often do you do the following?				
	a) Share your own created content (status updates, pictures or videos) on social media	1 = Never	28,56	19,22	15,05

b) Share content created or shared by others on social media	2 = Less than weekly	28,5	19,22	15,22
c) Send confidential or sensitive messages on messaging applications	3 = Weekly	28,56	19,22	15,75
d) Use social media while also watching television programs	4 = Daily	28,58	19,22	15,14
e) Keep up to date on societal and political discussions on social media		28,95	19,22	15,14
f) Produce social or political content on social media		28,54	19,22	15,31
g) Share political or civic content created by others on social media		28,3	19,22	15,22

	h) Participate in civic or political discussion on social media	28,26	19,22	15,31
	i) Update a diet diary online	28,34	19,22	15,4
	j) Participate in online discussion concerning weight loss	28,42	19,22	15,4
	k) Watch exercise videos online	28,38	19,22	15,66
	l) Read blogs having to do with health or exercise	28,38	19,22	15,57
	m) Read blogs having to do with beauty or fashion	28,5	19,22	15,49
	n) Use online dating services	28,46	19,22	15,4
q26_a - q26_i	What do you think to the following statements?			

a) I am interested in social media posts with which I disagree	1 = Completely disagree	28,22	19,7	15,31
b) I feel that others are trying to affect my opinions through social media	...	28,26	19,54	15,31
c) I am concerned that people I interact with will publicize content from my personal messages without my consent	3 = Do not disagree or agree	28,5	19,62	15,49
d) I can trust that social media platforms such as Facebook will not publicize my personal messages	...	28,62	19,54	15,22

e) Hate speech makes me think twice about participating in social media discussions	5 = Completely agree	28,58	19,54	15,31
f) Social media sometimes creates appearance related worries in me		28,46	19,7	15,49
g) Social media sometimes makes me feel like I need to lose weight		28,58	19,54	15,4
h) Social media sometimes makes me feel like I need to be more muscular		28,34	19,62	15,31
i) Social media sometimes makes me feel like I need to work harder on my appearance		28,38	19,54	15,57

q27_a -
q27_n

**What do you think
about the following
statements?**

a) Social media has
made interactions be-
tween different popula-
tion groups possible bet-
ter than before

1 = Completely
disagree

2,59 0,4 0,52

b) Social media has
brought equality to vari-
ous population groups in
terms of civic activity

...

2,63 0,56 0,35

c) Social media has in-
creased citizens' politi-
cal awareness

3 = Do not disagree
or agree

2,96 0,72 0,87

d) Users can freely ex-
press their opinions on
social media

...

3,32 0,64 0,7

e) Harmful information of commercial actors are purposefully spread on social media	5 = Completely agree	3,12	0,72	0,79
f) Social media has improved the level of influence of consumers		2,96	0,88	0,61
g) Social media discussions should be more monitored due to hateful and attacking tendencies		3,04	0,56	0,44
h) I am concerned with the spread of fake news on social media		2,63	0,64	0,79

i) Algorithms direct users' access to information too much online	6,76	0,8	0,96
j) It is alright to comment on other users' appearance on social media if the comment is positive	3,12	1,04	
j_2) Security breaches happened over the last year concern me			0,87
k) It is alright to comment on the appearance of public figures on social media	2,96	0,72	

l) It is alright to comment on another person's appearance on social media if it has to do with attire rather than physical traits.	2,71	0,8
m) It is alright to comment on another person's appearance on social media if that person is not aware of the comment	3,08	0,96
n) Commenting on another person's appearance is not acceptable in any circumstance	2,83	1,12

q28_1 -
q28_20

Listed below are the most common forms of civic participation. Please circle all options that you have done in the past five (5) years

1. Voted in parliamentary elections	0 = No	1,09	0,85	
2. Voted in municipal elections	1 = Yes	1,01	0	
3. Voted in E.U. elections		1,42	0	
4. Been an electoral candidate		0,81	0	
5. Participated in a national panel		0,81	0	
6. Participated in a public demonstration		0,85	0	11,64

7. Boycotted products or companies for political, ethical or environmental reasons	0,81	0	11,64
8. Purchased products for political, ethical or environmental reasons	0,89	0	11,64
9. Been active in the activities of the Church or another religious community	0,85	0	11,64
10. Participated in a sports or exercise club	0,85	0	11,64
11. Donated money to charity	0,85	0	11,64
12. Acted as a volunteer	0,93	0	11,64

13. Participated in a local community group meeting	0,77	0	11,64
14. Contacted a politician	0,81	0	11,64
15. Participated in illegal civic or political activity	0,81	0	11,64
16. Written an online review of a product or service	0,81	0	11,64
17. Participated in professional position of trust	0,81	0	11,64
18. Been a member of a political party	0,81	0	11,64
19. Been active in an NGO	0,85	0	11,64
20. Been active in a student association	0,85	0	11,64

q29	<p>Which of the following political parties is most important to you? Select one.</p>	3,08	1,2	0,61
	1. Centre Party			
	2. Finns Party			
	3. NCP			
	4. SDP			
	5. Green League			
	6. Left Alliance			
	7. RKP			
	8. Christian Democrat			
	9. Blue Reform			
	10. Other, which?			
	11. None			
q29_2	Other party (see q29)			

q29_a1	Which of the following political parties' candidate or political movements' candidate would you vote for if the parliamentary elections were now?	1,05
	<ol style="list-style-type: none">1. Centre Party2. Finns Party3. NCP4. SDP5. Green League6. Left Alliance7. RKP8. Christian Democrat9. Blue Reform10. Other, which?11. None	
q29_a2	Other party (see q29_a1)	0,02

q29_aa1 **Could you vote the fol-**
 - **lowing political parties**
 q29_aa20 **or political movements**
at the next parliamen-
tary elections?

1. Centre party	1 = No	1,57
2. Finns Party	2 = Maybe	2,01
3. NCP	3 = Yes	2,01
4. SDP	4 = I do not know the party or move- ment in question	1,31
5. Green League		2,36
6. Left Alliance		1,92
7. RKP		2,71
8. Christian De- mocrats		2,19
9. Blue Reform		2,36
10. Movement Now		2,27
11. Seven Star Mo- vement		2,27
12. Feminist Party		2,27

13. Pirate Party	2,27
14. Communist Party of Finland	2,36
15. Communist Workers' Party	2,1
16. Liberal Party	2,01
17. Animal Justice Party	2,01
18. Citizens' Party	2,45
19. Independence Party	2,45
20. Finnish Nation First	2,19

q30	<p>There is often talk of the left and right in addition to liberal and conservative values. Where would you place yourself along the following scale? (0-10)</p>	0 = left – 10 = right	8,83	5,66	0,52
q30_b	<p>There is often talk of the left and right in addition to liberal and conservative values. Where would you place yourself along the following scale? (0-10)</p>	0 = liberal – 10 = conservative	12,39	6,62	0,52
q31_a - q31_o	<p>How do you relate to the following?</p>				

a) The right to have an abortion	0 = Very negatively	1,13	1,04	0,09
b) Protecting Christian values	...	1,26	0,48	0,35
c) Placing economic policy ahead of environmental policy	10 = Very positively	1,78	0,56	0,17
d) Increasing immigration		1,26	0,48	0,26
e) Same-sex marriage		1,78	0,72	0,87
f) Increasing the military budget		1,54	0,48	0,52
g) The diminishing importance of the nuclear family		1,98	0,88	0,96
h) Protecting patriotism		1,82	0,48	0,44
i) Cuts to social security		2,11	0,48	0,44
j) Dismantling of the current welfare society		1,7	0,56	0,35

	k) Outsourcing public services		2,15	0,64	0,87
	l) Depopulation of rural areas		1,5	1,12	0,96
	m) Regional concentration of welfare services		1,58	1,04	1,22
	n) Deregulating store hours of operation		1,38	0,56	0,35
	o) Deregulating the sale of alcohol		1,01	0,72	0,61
q32_a - q32_m	How trustworthy do you consider the following?				
	a) Parliament	1 = Not trustworthy at all	1,46	0,72	0,35
	b) The Finnish justice system	...	1,05	0,56	0,17
	c) Police	5 = Very trustworthy	1,7	0,88	0,52
	d) Politicians		1,46	0,48	0,87
	e) Political parties		1,54	0,8	0,61

f) European parliament	1,9	0,56	0,35
g) Traditional news media (e.g. Yle, HS)	1,34	0,56	0,26
h) Tabloid journalism (e.g. Iltalehti)	1,66	1,04	0,17
i) Alternative media (e.g. MV-lehti)	4,45	0,64	0,26
j) Google	3,4	0,48	0,35
k) Facebook	4,62	0,48	0,44
l) Apple	5,87	0,48	0,79
m) Amazon	7,21	1,12	0,96

q32_aa	<p>The so called post-truth time can be described as follows: "Objective facts influence the public opinion less than appealing to emotions and personal beliefs". How do you view the claim: "We live in a post-truth time".</p>	<p>1 = Completely disagree ... 3 = Neither agree nor disagree ... 5 = Completely agree</p>	2,1
q32_1a - q32_1h	<p>What do you think about the following statements?</p>		

a) Government officials should interfere hate speech happening in the internet more clearly than they currently do	1 = Completely disagree	0,35
b) Service providers operating online (such as Facebook, Google) should interfere hate speech happening in the internet more clearly than they currently do	...	0,26
c) I can recognize hate speech	3 = Neither agree nor disagree	0,87
d) Hate speech is a significant social problem	...	0,7

e) Hate speech should be allowed in the name of freedom of speech	5 = Completely agree				1,05
f) It is good that the knowledge produced by specialists is challenged more clearly					0,17
g) I trust Finnish journalists					1,05
h) People should be free to express thoughts that are politically incorrect					0,44
q33_a - q33_f	To what extent...				
a) do you have friends and acquaintances compared to others your age	1 = Not at all	1,01	0,4		0,17

	b) do you have friends and acquaintances on social media	...	2,51	0,4	0,17
	c) do you trust your friends and acquaintances on social media	5 = Very much	4,78	0,56	0,96
	d) are you in contact with your friends and acquaintances on social media		3,4	0,8	1,05
	e) are you in contact with strangers on social media		3,6	0,64	0,35
	f) does social media help your feelings of loneliness		4,05	0,96	0,79
q34	Are you lonely?	1 = Never	3,32	0,72	0,61
		2 = Rarely			
		3 = Sometimes			
		4 = Often			
		5 = Always			

q35_a - q35_g	Please answer the following questions that apply to you with yes or no			
	a) Have you been targeted by threat or attack on social media? 1 = Yes	2,39	0,4	0,26
	b) Have you been falsely accused online? 2 = No	2,55	0,56	0,44
	c) Have you been falsely accused in print?	2,02	0,48	
	d) Has your online account been stolen or a new account made with your name without your permission?	2,63	0,56	0,61

	e) Have you been targeted with hateful or degrading material on the Internet?	2,75	0,4	0,26
	f) Have you experienced sexual harassment social media?	2,87	0,72	0,96
	g) During the past 3 months, have you seen hateful or degrading writing or speech online inappropriately attacking individuals or groups?	3,78	0,64	0,87
q35_f2	You answered that you have seen hate speech online during the past 3 months. What kind of hate speech have you seen?			62,64

q36_a -
q36_i

**How would you rate
the following on a scale
from 0–10?**

a) Your financial situation (0 very bad – 10 very good)	0 = very bad – 10 = very good	0,65	0,72	0,09
b) Your prospects for the future (0 very bad – 10 very good)	0 = very bad – 10 = very good	0,81	0,88	0,09
c) Your happiness (0 very unhappy – 10 very happy)	0 = very unhappy – 10 = very happy	0,65	0,72	0,09
d) Your satisfaction of your life (0 Very unsatisfied – 10 very satisfied)	0 = Very unsatisfied – 10 = very satisfied	0,85	0,72	0,09

e) Your trust in people in general (0 you can never be too careful – 10 most people are trustworthy)	0 = you can never be too careful – 10 = most people are trustworthy	0,77	0,56	0,09
f) Your health (0 very poor – 10 very good)	0 = very poor – 10 = very good	0,53	0,8	0,09
g) Your self esteem (0 very poor – 10 very strong)	0 = very poor – 10 = very strong	0,93	0,8	0,09
h) Your understanding of social issues (0 very poor – 10 very good)	0 = very poor – 10 = very good	0,65	0,56	0,09
i) Your interest in politics (0 very little – 10 very interested)	0 = very little – 10 = very interested	0,65	0,8	0,09
q37_a - q37_e	How content are you with your...			
a) face	1= Not content at all	1,13	0,4	0,17

	b) weight	...	1,01	0,48	0,17
	c) height	3 = Somewhat content	1,38	0,4	0,17
	d) body	...	1,38	0,4	0,52
	e) overall appearance	5 = Very content	1,09	0,64	0,35
q38	In adding all household income (including social, retirement, and other benefits), what is your household's total income after taxes per month? If your do not remember exact amounts, make the closest possible estimation.		4,86	8,29	
weight1	Weight coefficient of age and gender				
weight2	Weight coefficient of social media usage				

weight3	Weight coefficient of education
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