European Social Survey

ON-LINE DATA COLLECTION FOR COMPARATIVE RESEARCH: PERSPECTIVES FROM THE EUROPEAN SOCIAL SURVEY

NCRM

Southampton

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European Social Survey

ASSESSING THE REPRESENTATIVENESS OF THE WORLD'S FIRST PROBABILITY BASED ON-LINE CROSS-NATIONAL PANEL

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CRONOS

- World's first input harmonised probability based on-line panel
- Recruited off face-to-face ESS Round 8 in GB, Estonia & Slovenia
- Harmonised as far as possible eg interviewer training for recruitment
- 6 waves plus a welcome survey. 20 minute surveys
- Unconditional incentives used
- Questback used for sample management and surveys
- Off-liners offered 3G enabled tablets (low take up, big effort)

CRONOS

- Stuck to closed questions as far as possible as open data difficult to manage and can be a problem for anonymity
- Many experiments included
- National teams responsible for translation and sample management
- Data freely available for download and linked to ESS face-to-face
- Wave specific weights now available (weight respondents back to Round 8)
- Panel has now ended.
- CRONOS 2?

CRONOS WAVES

	Start date	End date
Welcome survey (wave 0)	12/2016	04/2017
Wave 1	02/2017	06/2017
Wave 2	04/2017	06/2017
Wave 3	06/2017	08/2017
Wave 4	09/2017	10/2017
Wave 5	11/2017	12/2017
Wave 6	01/2018	02/2018

CRONOS response rates (%), number of interviews (partial+complete) as a proportion of the face to face ESS gross sample.

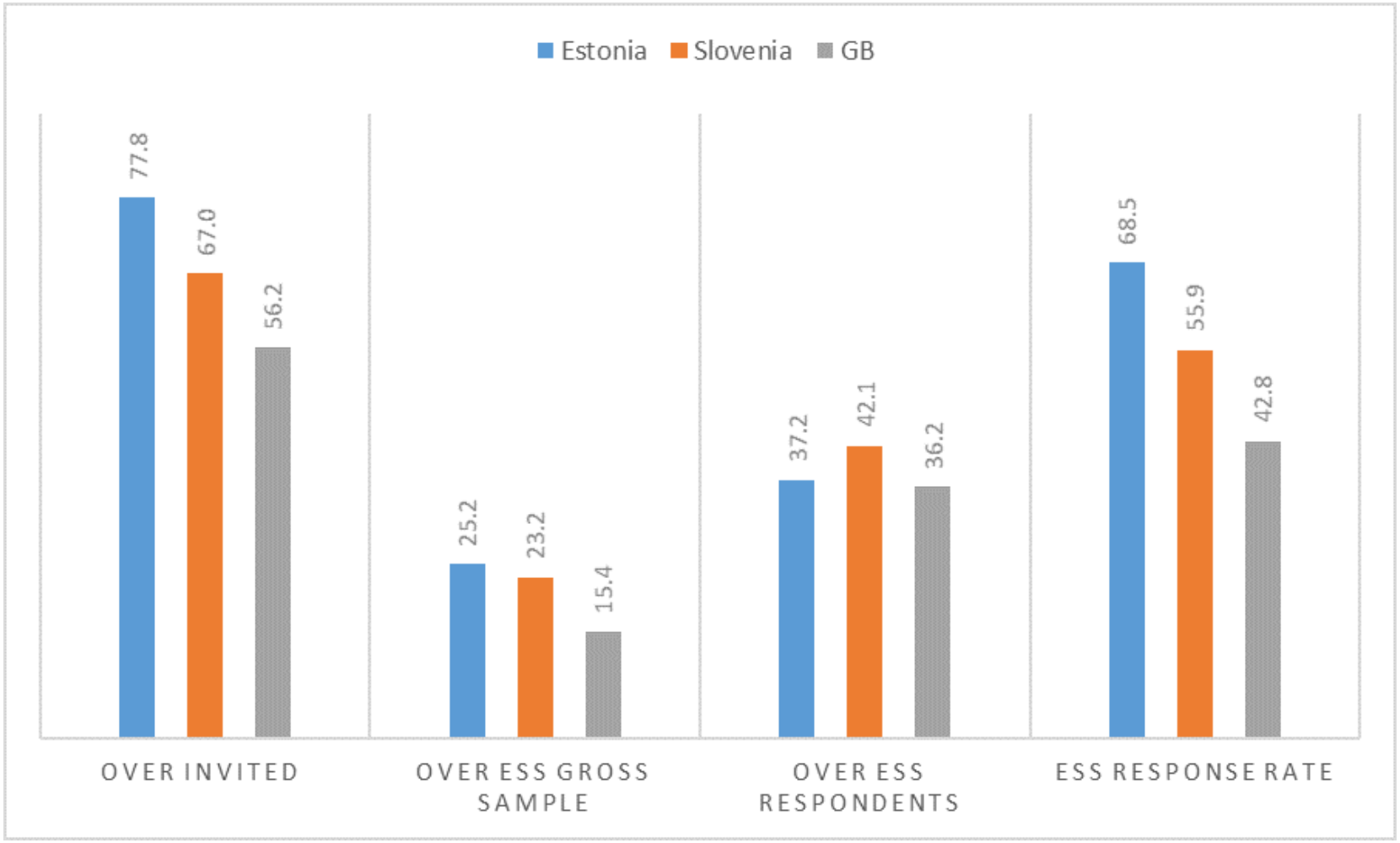
	Estonia		Great Britain		Slovenia	
Wave	%	n	%	n	%	n
0	23	669	12	539	29	642
1	25	730	15	685	23	529
2	23	664	16	692	21	482
3	22	624	15	679	26	586
4	20	581	14	610	25	561
5	21	600	14	633	27	615
6	21	600	14	641	25	571
Gross sample		2901		4447		2278

CRONOS participation rates (%): number of participants (partial+complete) as a proportion of sample units invited to participate in CRONOS

	Estonia		Great Britain		Slovenia	
Wave	%	Invited	%	Invited	%	Invited
0	72	933	44	1215	82	779
1	78	938	56	1218	67	790
2	82	807	60	1152	63	770
3	79	786	59	1147	81	725
4	74	784	53	1144	78	722
5	77	782	55	1141	85	720
6	77	782	56	1136	80	718

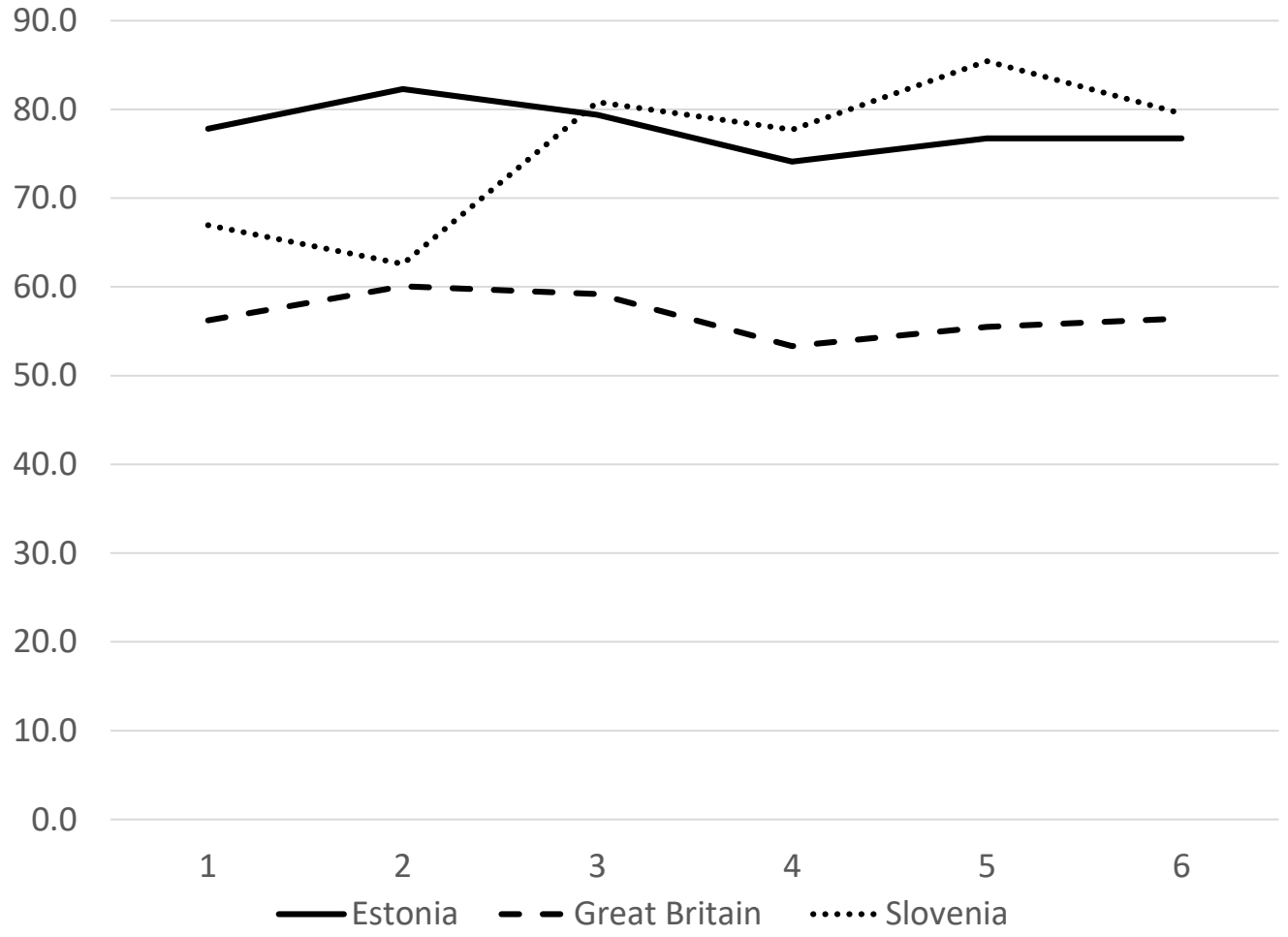
Response rate

The total sample size is 1944 panellists (Estonia 730, Slovenia 529, Great Britain 685)



CRONOS participation rates

CRONOS participation rates across waves by Country (%): number of participants (partial+complete) as a proportion of sample units invited to participate in CRONOS



Assessing discrepancies between CRONOS/ESS/POP

Duncan dissimilarity index between CRONOS, ESS and Population

	Estonia		GB		Slovenia			
	CRONOS/ ESS	CRONOS/ POP	CRONOS/ ESS	CRONOS/ POP	CRONOS/ ESS	CRONOS/ POP	Average ESS	Average POP
Gender	3.7	3.9	1.0	4.1	1.8	5.2	2.2	4.4
Age	11.1	8.3	6.5	10.1	12.3	9.4	10.0	9.3
Education	9.1	6.2	5.7	2.3	7.5	7.6	7.4	5.4
Employment relation	1.0	3.5	2.1	2.3	0.9	1.3	1.3	2.4
Work status	2.7	2.2	1.2	1.8	0.1	2.9	1.3	2.3
Citizenship	4.0	8.9	1.3	0.8	0.6	4.0	2.0	4.6
Household size	3.2	5.6	1.0	1.9	0.7	6.6	1.6	4.7
Marital status	0.4	3.0	5.4	7.5	1.6	3.4	2.5	4.6
Average	4.4	5.2	3.0	3.9	3.2	5.1	3.5	4.7

Education and Age

Education		*Estonia*	*GB*	*Slovenia*
	CRONOS	8.5	20.3	8.8
Primary	ESS	13.6	25.6	16.4
	EU-LFS	14.8	21.1	15.2
	CRONOS	52.9	42.5	65.4
Secondary	ESS	56.9	42.9	62.9
	EU-LFS	50.2	40.2	57.8
	CRONOS	38.6	37.2	25.7
Tertiary	ESS	29.5	31.5	20.7
	EU-LFS	35.1	38.8	26.9

Age distribution		*Estonia*	*GB*	*Slovenia*
	CRONOS	10.1	10.2	8.1
18-24	ESS	7.8	9.3	8.6
	POP	8.8	11.2	8.4
	CRONOS	20.4	13.6	19.7
25-34	ESS	16.5	15.6	14.5
	POP	18	17.2	16.1
	CRONOS	37.3	36.5	41
35-54	ESS	32.3	34.4	33.8
	POP	33.1	34	35.9
	CRONOS	16.6	17	18
55-64	ESS	17.6	16.1	19.7
	POP	16.2	14.7	17.2
	CRONOS	11.1	18	9.8
65-74	ESS	13.9	15.5	12.7
	POP	12.1	12.6	11.8
	CRONOS	4.5	4.7	3.4
75+	ESS	11.8	9.3	10.6
	POP	11.8	10.3	10.5

Assessing the CRONOS respondents' characteristics

In order to assess whether specific demographic variables predict the propensity to join the CRONOS panel, we performed a logistic regression

	B	S.E.	Sig.	Exp(B)	95% C.I.for EXP(B)	
Female	0.134	0.065	.039	1.143	1.007	1.298
65+						
18-34	0.022	0.116	.850	1.022	0.814	1.283
35-64	0.117	0.103	.258	1.124	0.918	1.376
Primary						
Secondary	0.326	0.094	.001	1.385	1.152	1.665
Tertiary	0.489	0.106	.000	1.631	1.326	2.006
Voted	0.400	0.080	.000	1.492	1.275	1.746
Paid Work	-0.250	0.080	.002	0.779	0.665	0.912
Living comfortably or coping	0.199	0.095	.037	1.220	1.012	1.470
Internet Use – Never						
Occasionally/Most days	1.167	0.128	.000	3.212	2.498	4.130
Every day	1.789	0.125	.000	5.986	4.687	7.645

Overall pseudo R^2 value = .148.

Attitudes and behaviours

As Couper noted (2000), even though the demographic characteristics of web survey respondents match those of the population, the fundamental question is whether they are also similar on the substantive variables of interest concerning attitudes and behaviours.

	B	S.E.	Sig.	Exp(B)	95% C.I.for EXP(B)	
Participation	0.524	0.069	0.000	1.688	1.475	1.931
Health	0.270	0.077	0.000	1.311	1.128	1.523
Household's total net income	0.038	0.014	0.006	1.039	1.011	1.067
Most people can be trusted	0.051	0.016	0.002	1.052	1.019	1.086
Trust in country's parliament	0.036	0.015	0.017	1.037	1.007	1.068
How worried about climate change	0.207	0.074	0.005	1.231	1.065	1.422
How satisfied with life as a whole	0.035	0.019	0.059	1.036	0.999	1.075
Gays and lesbians free to live life as they wish	0.095	0.079	0.229	1.099	0.942	1.283
Immigrants make country better place to live	0.013	0.016	0.418	1.013	0.982	1.046
How often socially meet with friends, relatives or colleagues	0.003	0.023	0.884	1.003	0.959	1.049
Domicile - Country						
Town/Small City	0.035	0.081	0.670	1.035	0.883	1.213
City	-0.025	0.082	0.764	0.976	0.831	1.146
Gender	0.181	0.067	0.007	1.198	1.051	1.366
Age	-0.007	0.002	0.001	0.993	0.989	0.997
Years of education completed	0.050	0.011	0.000	1.051	1.029	1.074

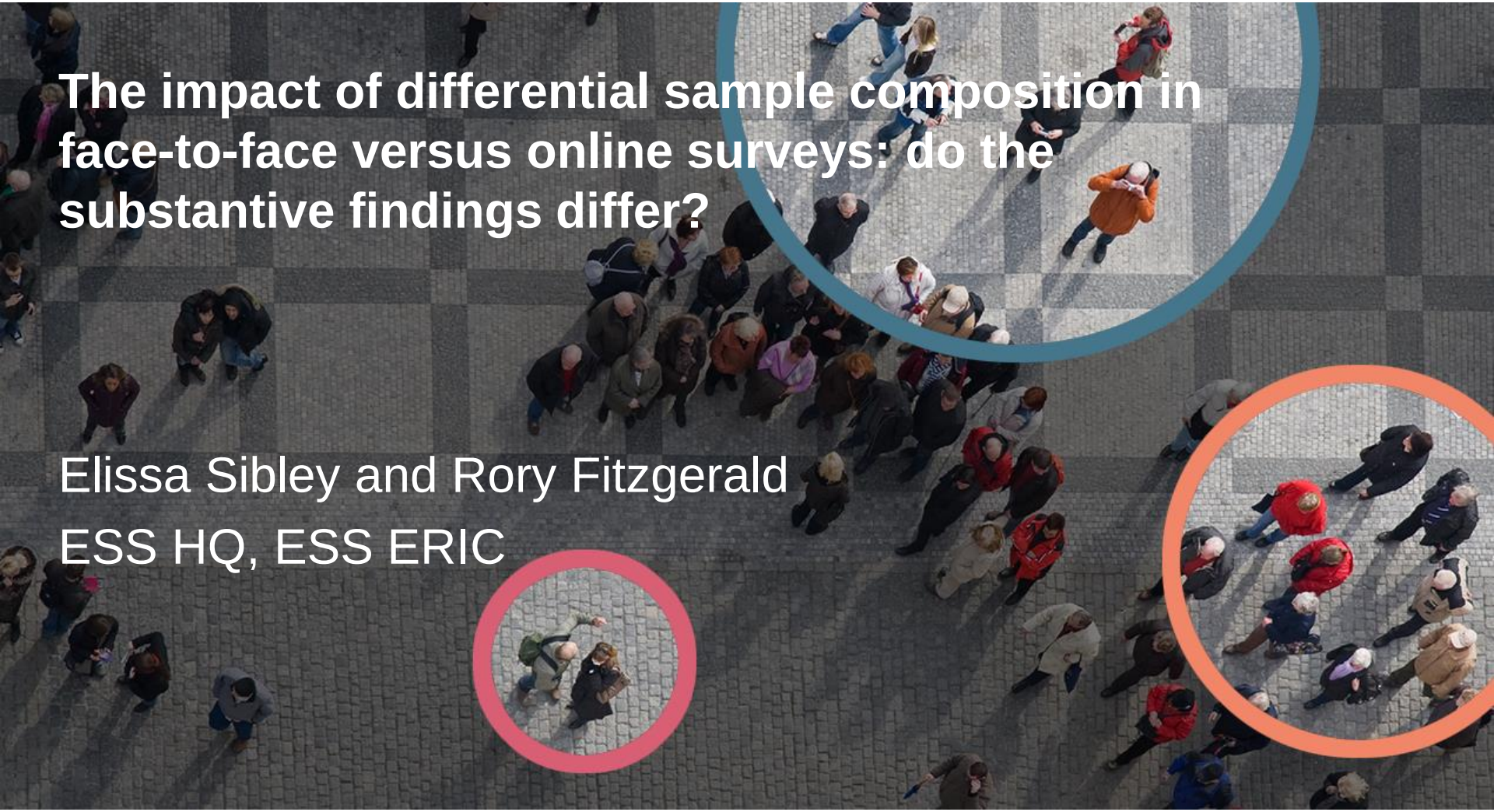
Implications

- Age, internet use and especially the interaction between these variables suggest that web surveys remain an unsuitable way to survey those aged over 75 years, particularly in those countries with a low internet penetration rate.

- Logistic regressions suggest that the key driver is mainly internet use.

- Taking into account that internet penetration rates are very likely to increase in the future – and ICT literacy along with it – web surveys and web panels should be progressively less affected by sample composition bias and non-response error in future.

- At the same time, we should be aware that as internet penetration rates increase, the discrepancy between the online and offline population might increase as well. The off-line group may represent a more and more highly isolated and extremely differentiated niche.



The impact of differential sample composition in face-to-face versus online surveys: do the substantive findings differ?

Elissa Sibley and Rory Fitzgerald

ESS HQ, ESS ERIC

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 654221.

Research question

Do statistical models run using the CRONOS achieved sample differ from those generated by data from the full ESS achieved sample when using only answers from the face to face survey ?

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 654221.

We only used data from the ESS face-to-face interview – any differences must reflect differences in either

representativeness

OR

sample size

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Approach

- Predictive models for three outcome variables:
  - Social trust
  - Attitudes towards homosexuals
  - Attitudes towards immigration
- Use ESS8 data from:
  - All ESS8 respondents (aged 18+) from Estonia, Slovenia and GB
  - Subsample who later participated in CRONOS W1
- Compare models between ESS8 and CRONOS subsample:
  - Are the models the same?
  - How substantial are any differences?

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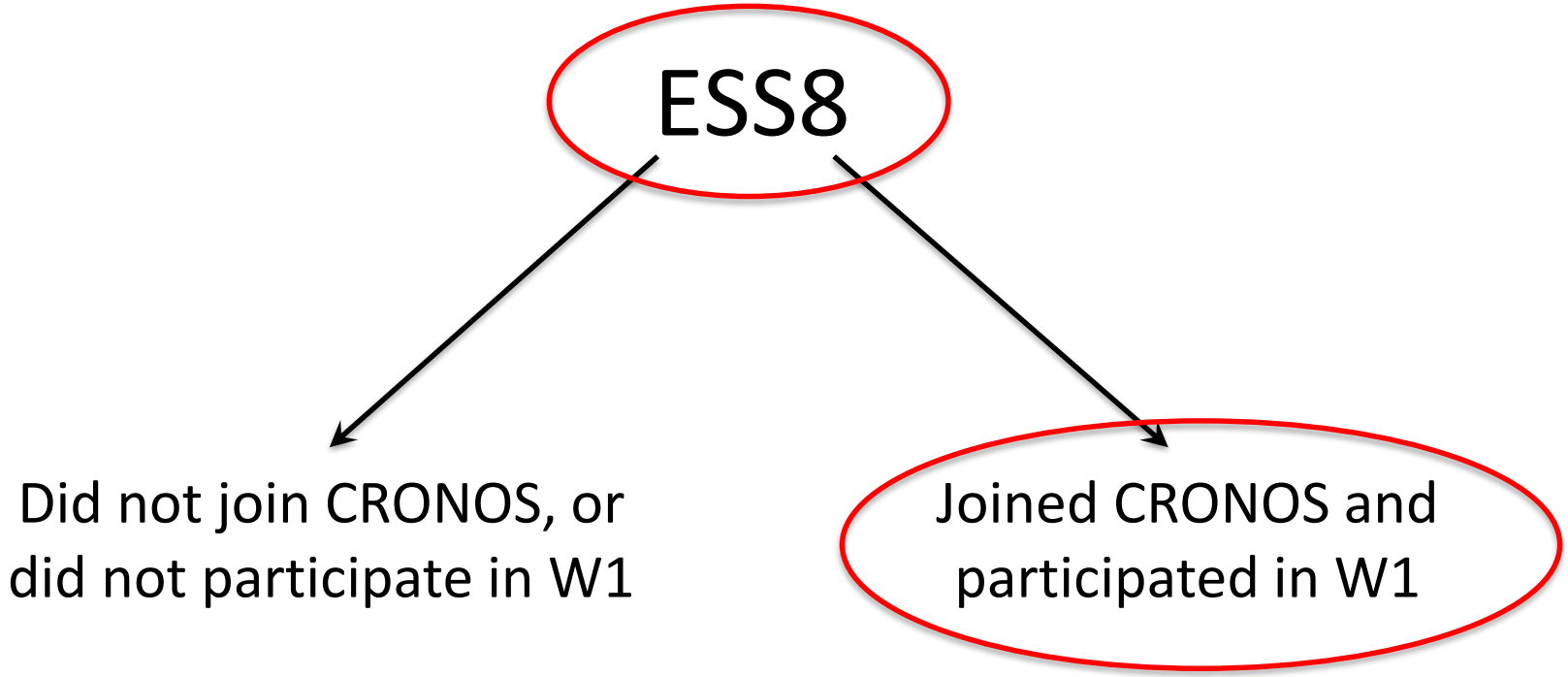
Populations: full ESS8 achieved sample, and subsample who participated in CRONOS W1



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Used those who participated in CRONOS W1 to compare to all ESS8

Unweighted N-values

	Estonia	Slovenia	Great Britain
ESS8 (*gross*)	2901	2278	4447
ESS8 (*net*)	1963	1256	1825
CRONOS W1 (net)	730	529	685
CRONOS % of ESS net	37%	42%	37%
CRONOS % of ESS gross	25%	23%	15%

ESS8: age 18+, GB (excludes NI)

CRONOS: All who participated in W1

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Generalised social trust

1. Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?
2. Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?
3. Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?

Response scale: 0 (least trusting) – 10 (most trusting)

Mean score

	Estonia	Slovenia	GB
ESS8 (pspwght)	5.68 (.038)	4.85 (.054)	5.64 (.039)
CRONOS (w1weight)	5.83 (.062)	5.01 (.076)	5.82 (.063)

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Generalised social trust: Comparing models

Weighting: pspwght (ESS8); w1weight (CRONOS W1)	Estonia		Slovenia		GB	
	ESS8	CRONOS	ESS8	CRONOS	ESS8	CRONOS
Age	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +
Sex (1 = female)	+ + +				+	
Number of years' education	+ + +		+ + +	+ + +	+ + +	+
Happiness (10 = happiest)	+ + +	+ + +	+ + +	+ +	+ + +	+ + +
Financial comfort (1 = living comfortably, 4 = v. difficult)	- - -				- -	
Freq. of social contact (7 = daily)			+ +			
Feel safe (1 = v. safe, 4 = v. unsafe)	- - -	-	- - -	- - -	- - -	- - -
Religiosity (10 = most religious)			+ + +		+	
Domicile (ref. cat. = Big city/suburb)						
Town/small city	+ +	+				
Village/countryside						
R^2	**.140**	**.119**	**.133**	**.169**	**.129**	**.150**
W1 participant (1 = yes)	+		+ + +		+ + +	

Generalised social trust: Comparing models

Weighting: pspwght (ESS8); w1weight (CRONOS W1)	Estonia		Slovenia		GB	
	ESS8	CRONOS	ESS8	CRONOS	ESS8	CRONOS
Age	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +
Sex (1 = female)	+ + +				+	
Number of years' education	+ + +		+ + +	+ + +	+ + +	+
Happiness (10 = happiest)	+ + +	+ + +	+ + +	+ +	+ + +	+ + +
Financial comfort (1 = living comfortably, 4 = v. difficult)	- - -				- -	
Freq. of social contact (7 = daily)			+ +			
Feel safe (1 = v. safe, 4 = v. unsafe)	- - -	-	- - -	- - -	- - -	- - -
Religiosity (10 = most religious)			+ + +		+	
Domicile (ref. cat. = Big city/suburb)						
Town/small city	+ +	+				
Village/countryside						
R^2	**.140**	**.119**	**.133**	**.169**	**.129**	**.150**
W1 participant (1 = yes)	+		+ + +		+ + +	

pspwght; w1weight	Estonia		Slovenia		GB	
	ESS8	CRONOS	ESS8	CRONOS	ESS8	CRONOS
Age	.014*** (.010,.018)	.013*** (.006,.020)	.014*** (.008,.021)	.019*** (.009,.028)	.008*** (.004.012)	.012*** (.005,.018)
Sex (1 = female)	.277*** (.130,.424)	.235 (-.010,.479)	.036 (-.175,.247)	.213 (-.092,.518)	.176* (.023,.328)	.088 (-.161,.338)
Years' education	.057*** (.035, .080)	.031 (-.005,.067)	.109*** (.075,.142)	.122*** (.075,.169)	.048*** (.028,.069)	.042* (.007,.077)
Happiness	.206*** (.164,.248)	.220*** (.144,.296)	.170*** (.112,.228)	.139** (.051,.226)	.167*** (.124,.210)	.120*** (.049,.192)
Financial comfort	-.193*** (-.296,-.091)	-.168 (-.351,.014)	-.087 (-.230,.055)	-.122 (-.314,.071)	-.153** (-.259,-.047)	-.095 (-.260,-.071)
Freq. social contact	.034 (-.015,.084)	.022 (-.063,.108)	.113** (.041,.185)	.091 (-.013,.194)	.047 (-.001,.095)	.016 (-.062,.094)
Feel safe	-.194*** (-.302,-.086)	-.242* (-.424,-.061)	-.433*** (-.607,-.259)	-.672*** (-.921,-.422)	-.313*** (-.410,-.216)	-.543*** (-.703,-.392)
Religiosity	.007 (-.017,.032)	.028 (-.013,.069)	.063*** (.029,.098)	.045 (-.003,.093)	.029* (.005,.053)	.001 (-.037,.039)
Domicile						
Town/small city	.244** (.077,.411)	.331* (.048,.613)	-.085 (-.385,.216)	.062 (-.351,.475	-.064 (-.233,.105)	-.018 (-.291,.255)
Village/countryside	.146 (-.036,.327)	.223 (-.085,.532)	-.033 (-.287,.222)	.102 (-.256,.461)	.003 (-.198,.204)	.050 (-.289,.389)
R^2	**.140**	**.119**	**.133**	**.169**	**.129**	**.150**
W1 participant	.167* (.018,.316)		.421*** (.210,.631)		.291*** (.143,.439)	

Generalised social trust: Standardised coefficients

pspwght; w1weight	Estonia		Slovenia		GB	
	ESS8	CRONOS	ESS8	CRONOS	ESS8	CRONOS
Age	.150***	.143***	.132***	.170**	.087***	.133***
Sex (1 = female)	.083***	.069	.009	.061	.054*	.027
Years' education	.116***	.063	.195***	.235***	.112***	.091*
Happiness	.228***	.221***	.170***	.138**	.180***	.125***
Financial comfort	-.090***	-.073	-.036	-.058	-.069**	-.044
Freq. social contact	.031	.020	.089**	.073	.044	-.015
Feel safe	-.081***	-.100**	-.139***	-.237***	-.160***	-.267***
Religiosity	.013	.049	.101***	.081	.056*	.002
Domicile						
Town/small city	.068**	.091*	-.019	.015	-.019	-.005
Village/countryside	.040	.059	-.009	.029	-.001	.013
R^2	**.140**	**.119**	**.133**	**.169**	**.129**	**.150**
W1 participant	.049*		.087***		.110***	

Social trust: Summary of key findings

- ESS8 data mostly confirms the model (based on Van de Veld and Saris (some exceptions but largely in line with expectations)
- CRONOS sample includes those with higher levels of social trust compared to the main ESS. Have slightly higher mean scores in CRONOS
- In most cases the independent variables behaved in same way in CRONOS and ESS8 samples
- Effect sizes are often similar between ESS8 and CRONOS even if the significance changes suggesting these differences may be due to sample size
- Some need for caution before comparing face to face sample with CRONOS sample & expecting equivalence however next step is to compare random subsamples of ESS8 which are same size as the sample of those who did CRONOS wave 1
- Found similar pattern for homosexuality and immigration models and where variables did behave differently they were not significant
- Next step is to compare means across a range of variables

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SSHOC

social sciences & humanities open cloud

Designing a Sample Management System for use in a cross-national on-line web panel: initial thinking and ideas

Rory Fitzgerald

SSHOC, "Social Sciences and Humanities Open Cloud", has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-04-2018, grant agreement # 823782.

Outline

- Challenges and the need for a SMS
- Aim of the project
- Functionality of the SMS
- Progress so far and timeline

The need for a cross-national SMS

- The ESS experimented with the worlds' first input harmonised probability based cross-national web panel in three countries by recruiting panel members who had taken part in the face-to-face survey (CRONOS)

- Key challenge:
  - absence of a sample management system suited for use in a multi-country multi-language environment and which could also meet data protection requirements / choices

Major challenges during CRONOS

- Harmonised management of the sample in the three different countries
- Harmonised management of incentives
- Central management of different survey contacts (postal mails, emails and SMS)
- Harmonisation of the surveys' translation into three different languages
- Access to panellists information at country and central level: restricting access right and preventing subsets of the staff being able to access panellists' personal information proved challenging

Key Aim

- No “off-the-shelf” commercial software that was flexible enough to manage the complexity of a cross-national sample

- ESS ERIC and Sciences Po will adapt the existing sample management system (SMS) for their national web panel to meet the needs of cross-national projects

Functionalities

- **Storing** and updating panel member information
  - Add new cases
  - Add new variables
  - Update existing variables
- **Managing** a panel throughout the course of survey life cycle keeping track of the panellists' activity
  - Updates from participants (e.g. contact details, opting out)
  - Updates from survey data (e.g. Whether or not the panel member has started/completed the interview)
    - The SMS should link directly with the survey instrument, allowing for updates to be pulled in 'live'
  - Fieldwork monitoring: generating basic tables
- **Participant communications**
  - centralised management of emails, text messages for invitations/reminders
    - Design of templates
    - Dispatch of emails
    - Collection & storage of paradata

Schedule and decisions

- ESS about to send the reviewed specification to SSHOC partners (EVS, SHARE, GGP) in order to consult them on the functionalities and requirements of the specification
- Possible interest from PEW
- SMS works with Qualtrics but communication driven from SMS
- User profiles are being defined with varying access rights eg national teams only access to sample information in own country

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