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European Social Survey academic impact monitoring

Annual report 2020

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Aims, methods and content of the report

In order to evaluate ESS academic impact, inform its questionnaire design and re-design and guide its outreach and communications actions ESS collects continuous and detailed feedback on its academic use. Bibliographic monitoring provides the following **information, outputs and guidance**:

- Longitudinal empirical evidence on the scope, geographical and disciplinary patterns of ESS academic usage, theory development and policy references;

- Empirical support for informed decision-making of the ESS bodies (CST, SAB and QDTs) concerning the questionnaire content (item and modules selection and revision), targeting training and communication strategies and similar;

- Summary bibliographic reports, a full list of citations (Appendix 1) with a possibility to produce tailor-made sub-lists according to various criteria and item usage statistics (Appendix 2). These documents help demonstrate ESS academic relevance to European and national funders and users (NCs, GA);

- Bibliographic repository for other work packages to be used for methodological testing, updating of ESS online bibliography, as well as to support ESS communication actions and produce relevant outreach materials.

- From January 2021 on, an online Google Scholar repository with a search functionality added. This will render bibliographic variables available to a wider audience, enabling users to browse ESS publications in according to a variety of criteria.

The 2020 annual bibliographic report (Deliverable 11.9) includes publications for the **period 2003-2019.** Across the report, an **ESS-based publication** is defined as any type of academic publication in English language, i.e. *journal article, book, book chapter, published conference, research paper, report* or *thesis*. It can either be methodological, or substantive, with at least one ESS item used in **primary analysis**. Accordingly, the relevant universe does not include ESS based publications in other languages or substantive publications using European Social Survey keyword without primary data usage (e.g. publications that report replicating ESS items, secondary citations of ESS data and similar). Due to extensive coding of variables derived from the texts, English language is a necessary limitation and to the extent these publications coincide with global academic visibility, the database seeks to achieve the highest possible coverage of ESS-based **international publications**.

As in previous years, ESS based publications were identified by the Google Scholar indexing tool, which is believed to be the most comprehensive when it comes to covering various types of publications (see Nederhof, 2006; Mayr and Walter 2007; Ware and Mabe, 2012). The key phrase '*European Social Survey*' + '*round(s)*' or '*wave(s)*' was searched for in the texts or abstracts to identify relevant publications. Those containing the keywords were reviewed case-by-case to confirm primary ESS data use. About 60% of the original Google

Scholar hits are discarded through this process due to irrelevance or duplication. The exercise resulted in 496 newly acquired publications for the publishing year 2019. With the inclusion of the latest annual batch, the combined number of ESS based publications and presentations has reached **4913**.

The 2020 ESS annual bibliographic report includes the following sections:

1 ESS use across academic communities

2 Research topics

3 Combining ESS data with other data sources

4 Knowledge production across ESS countries

5 The use of country data

6 The extent and dynamic of rotating module use

7 Associations between ABC core items and research themes

8 The cycle of rounds use

9 Analytical feedback

10 Informing policy

11 Concluding remarks

1 ESS USE ACROSS ACADEMIC COMMUNITIES

1.1 ESS publishing scope and trend

European Social Survey was designed with a **primary aim** to provide high-quality longitudinal comparative data to a number of academic communities and support empirical analysis of societal phenomena in a variety of scientific fields. The success of this mission is reflected in the number and scope of academic publications generated by the programme, which is also one of key performance indicators for European research infrastructures.

Figure 1 presents the standard summary chart of **ESS international publishing**. With the 2019 publishing year added, the overall number of ESS based publications identified via Google Scholar has reached 4913, with 2527 of them being articles in peer-reviewed journals. Trend lines include only journal articles as they are the most widely accessible category and therefore most suitable for cross-time comparisons. The dominant share of journal articles is partially due to their actual prevalence as the most widespread type of academic output, and partially to their much better coverage and accessibility in publication searches, also as a consequence of university subscription schemes.

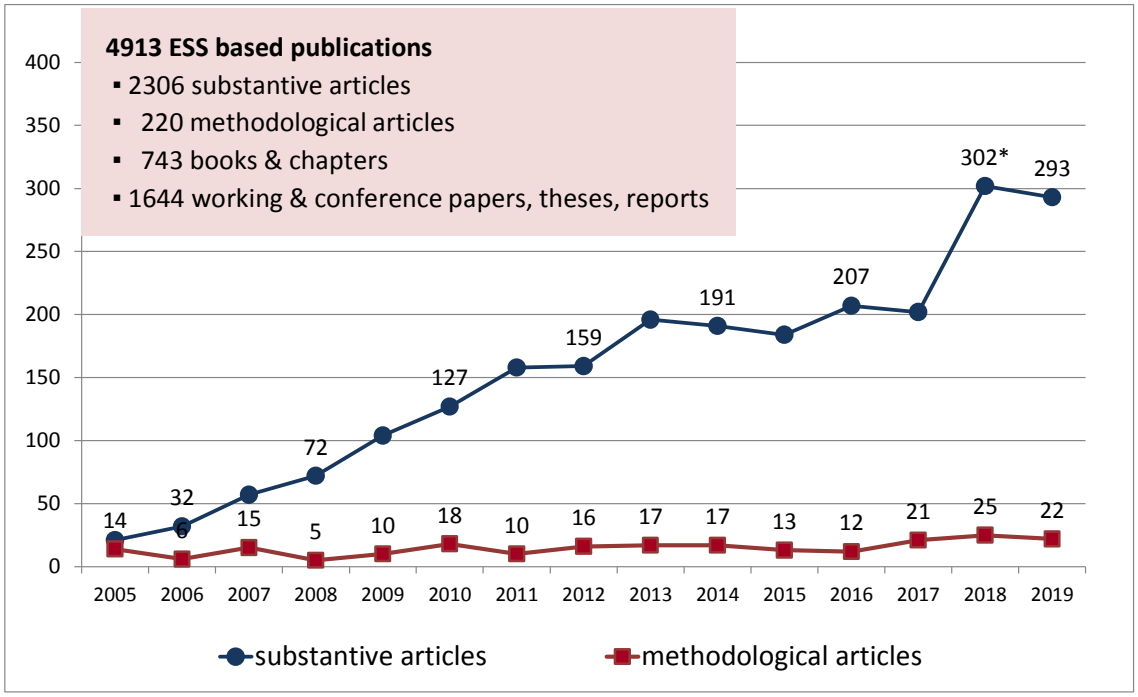

Figure 1: The scope and trend of ESS based academic publishing in the 2003-2019 period as identified by the Scholar
(new search algorithm applied from publication year 2018)*

Nevertheless, despite the scientific prestige of journal articles in academic evaluation exercises, documenting books, chapters, working and conference papers and theses might become more relevant when ESS will be subject to ESFRI evaluations where attention to other types of publications was explicitly highlighted (ESFRI 2018). As noted, books and book chapters are much more difficult to access and if so, access is often partial, in the form of incomplete previews. This renders establishing the presence of primary ESS data use in these publications much more difficult and the picture less complete. Accordingly, chapters,

conference papers, book chapters and theses are only documented (and counted) if full texts or a preview is available and ESS data usage can be verified. Degree works are a similar case, with universities pursuing very different publishing and access policies. On the other hand, working papers and reports are usually accessible without limitations and their coverage can therefore be considered as rather complete. At any rate, it can safely be assumed that the actual number of ESS–based English language publications is in fact (considerably) larger, particularly in the category of books, chapters and theses, while the coverage of international journal articles is reasonably complete.

1.2 Disciplinary profile of academic users

Another standard feature in ESS bibliographic monitoring is examining the spread of ESS based articles across academic disciplines, using **journal disciplinary field** as a proxy measure (Figure 2). There are six scholarly fields where ESS based analyses appear most frequently, most notably *sociology* (33.7%), *political science* (21.8%) and *economy* (14.2%), followed by *health & medicine* (6.6%), *psychology* and *methodology* (both 5.7%).

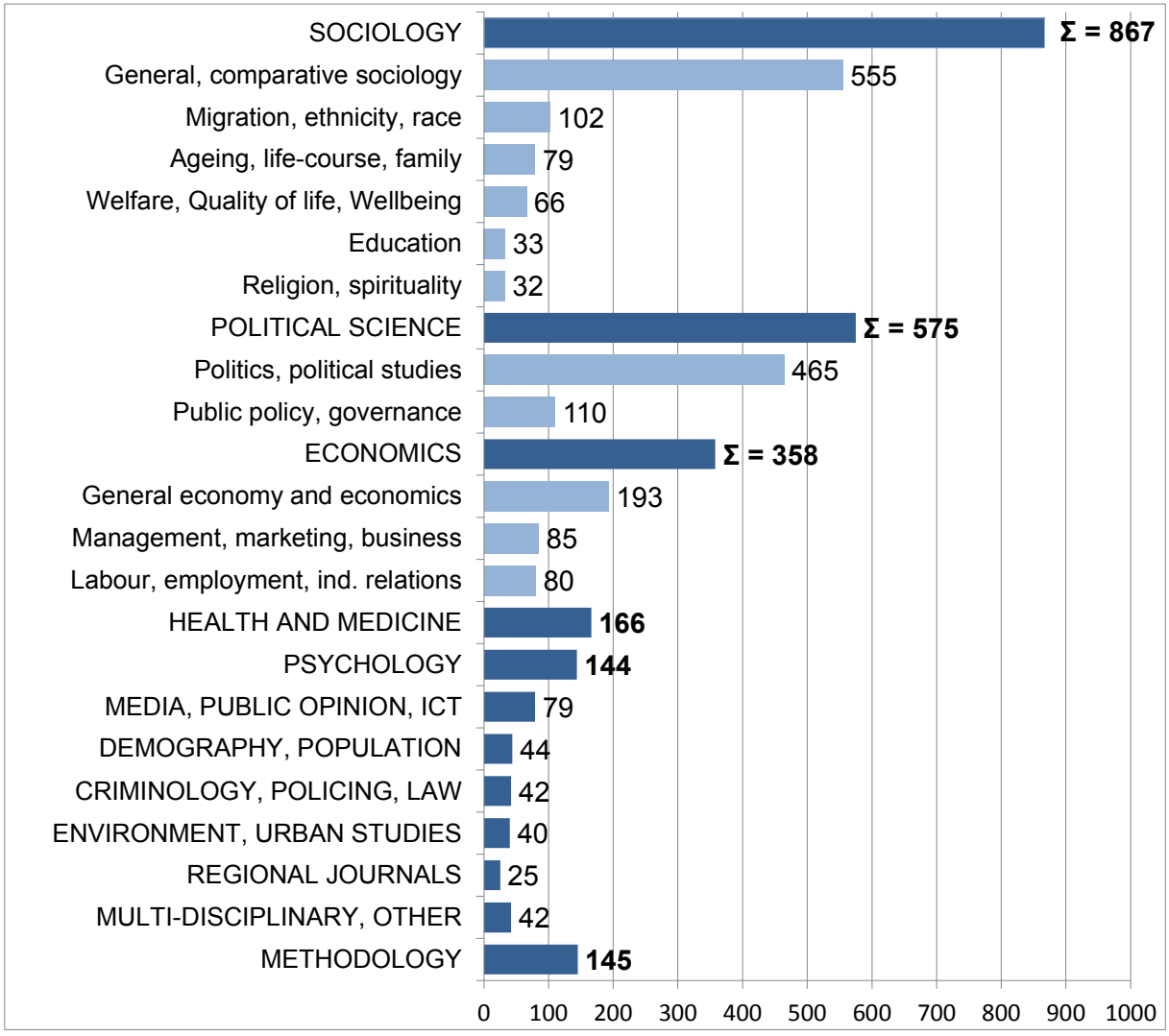

Figure 2: ESS outreach into academic fields in the 2003-2019 period, based on journal typology (N=2527)

The pattern demonstrates that the academic audiences that ESS creators were primarily targeting when designing the attitudinal ABC core part of the questionnaire, including the PVQ, has been reached, while a number of narrower academic communities are continuously being added to the picture through rotating modules (criminology, medicine, environment etc.). Besides the most widespread general-type journals in the areas of sociology, political science and economy, ESS articles most frequently appear in specialised migration journals, policy journals, labour market and management ~~journal~~ and family journals. The modules and item usage sections will examine more specific associations between academic communities, topics and questionnaire parts.

2 RESEARCH TOPICS

While an overview of academic communities provides information on the key academic disciplines where ESS supports data based knowledge production and policy making, **patterns of topics** reveal which specific issues analysts commonly address. It should be noted that this is an **evolving picture**, as ESS continues to revise and optimise its core questionnaire and develops new rotating modules. In recent rounds, topics such as *criminal justice, health inequalities* and *climate change* have been added to the topics map. Climate change in particular may show fast a growing trend as a battery was added to the core module. Therefore, as ESS approaches its 20th anniversary there are less and less obvious gaps to be filled, among which environment used to be the most significant one. In the future years, *digital social contacts* and *gender inequalities* are likely to experience a similar rise, as well as issues related to the *Covid-19 pandemic* and its aftermath. Here ESS is likely to constitute one of the most sought datasets for carrying out pre-post studies, both owing to its standard longitudinal indicators and the specific Covid-19 questionnaire included in R10.

Figure 3 presents a picture of substantive research topics most frequently investigated by ESS based authors (with up to two topics coded for each publication). To begin with, among the 4913 publications, 86.8% (4266) are **substantive** and 13.2% (647) **methodological**. Among the substantive publications, the topic most frequently addressed by ESS based authors by far remains *politics*, with the widespread exploration of the functioning of modern democratic systems. The second big topic is *immigration* that continues to be one of the most pressing social issues facing European countries and associates with many other issues such as political and welfare attitudes. Other prominent topics include *public policies and welfare, work-life conflict, macro-economic conditions* and others.

In addition to providing empirical basis for analysing a large number of theoretical and policy issues, ESS is also informs the analysis of big **social events** and their societal consequences. Last year's publications mapping revealed that, besides the aftermath of the 2008 global *financial crisis* reflected in major issues of youth unemployment, the rise of social movements, the rise of radical right, the decline of political trust, other significant events and their societal impact was frequently examined. Examples include *terrorist attacks* and their effects on electoral results or immigration policy, as well as European integration, Euroscepticism and *Brexit* with its populist surge, anti-establishment discourse. The effects of these events are analysed using a number of powerful longitudinal indicators of well-

being, political attitudes and others, as well as some dedicated questionnaire sections and items (e.g. on terrorism or Brexit). As noted, post-Covid analysis is likely to be the next such case, possibly the most extensive so far, considering the vast societal impact of the pandemic.

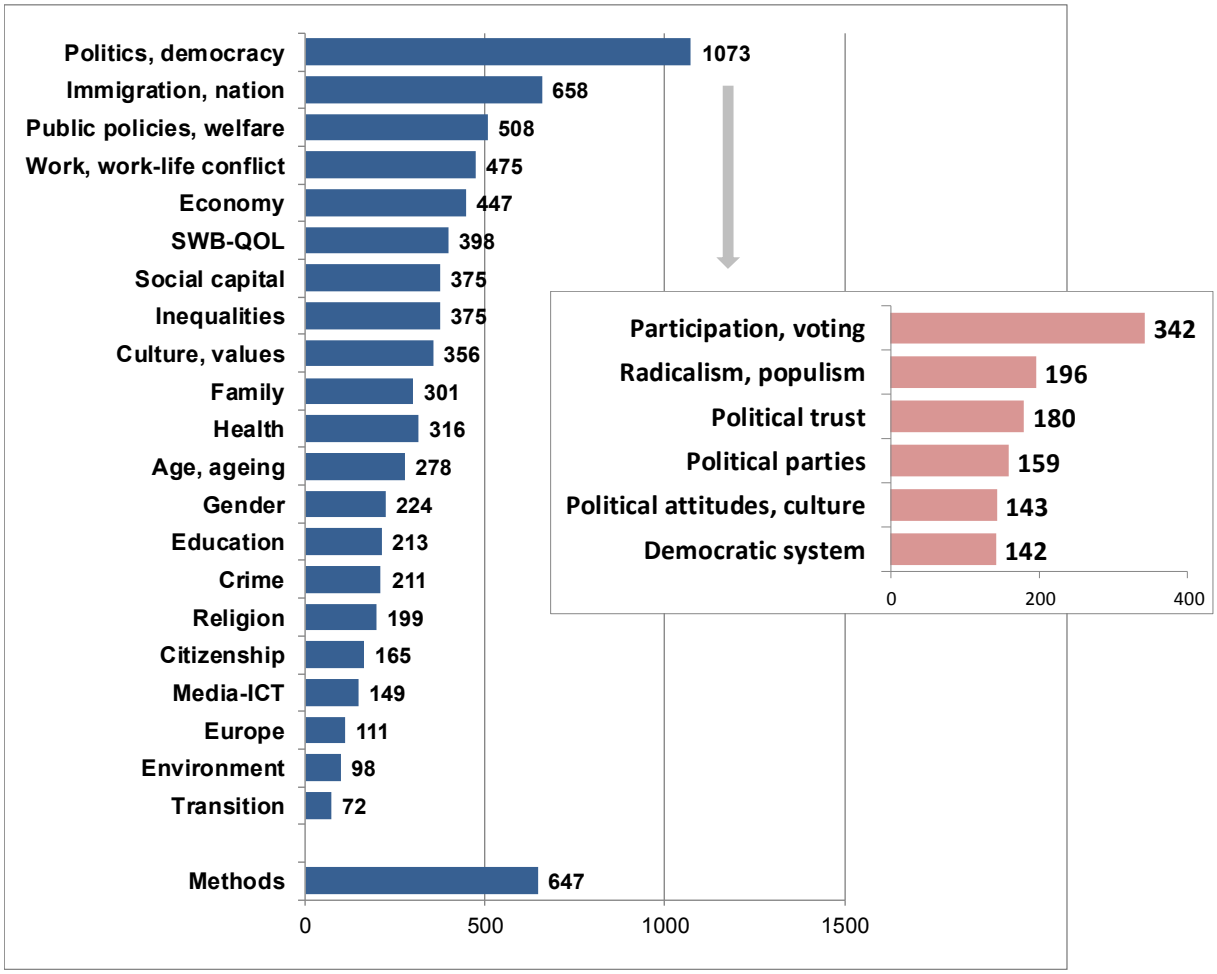

Figure 3: Number ESS publications addressing individual topics (up to two topics coded per publication, 2003-2019, N=4913)

3. COMBINING ESS DATA WITH OTHER DATA SOURCES

The main epistemological advantage of large general purpose cross-national surveys is that they enable comparisons of a large number of countries in a cross-sectional and cross-time perspective, a format which enables analysts to determine causality or test developmental societal theories, such as modernization theory (Andreß et. al 2019). They allow analysts to study public opinion under a wide variety of institutional and **societal contexts** where they can quantify the extent to which differences in outcomes reflect differences in country-specific features such as demographic structure, public policies, labour market characteristics and many others (Norris 2009; Bryan and Jenkins 2015). In this respect, comparative research is sometimes considered to be the equivalent of experimental research designs in the sciences (Mochmann 2008). Making the most of this possibility, an increasing share of studies based on cross-national surveys employ multilevel design,

combining individual-level microdata with macro indicators, seeking explanations for social phenomena in interaction between actors and institutions.

In practice this means that ESS-based publications are rarely *ESS only* based in a sense that ESS data is often combined with data from other sources. From the perspective of secondary users, a variety of macro and micro sources represent an ever more interdependent '**ecosystem' of indicators**, rather than a collection of self-sustaining units, which is why ESS bibliographic exercise also measures the presence of other data sources in ESS publications. The goal is to obtain at least rough feedback on the *synergies* created by combining ESS micro and macro indicators, but in particular synergies between ESS and other micro data, most notably data from other comparative surveys which count among the leading sources of individual-level comparative findings.

According to Figure 4, the practice of combining data sources is indeed substantial. The *GDP* **macro** indicator measuring countries affluence is referred to in about 36% of ESS journal articles, either as part of analytical models or in the text, which is not surprising considering the importance of a country's overall wealth in explaining many social issues. In addition, about a third of ESS based journal articles use multi-level analysis, which implies the use of a wide scope of macro-indicators and quantifies their explanatory effects in relation to the individual-level effects.

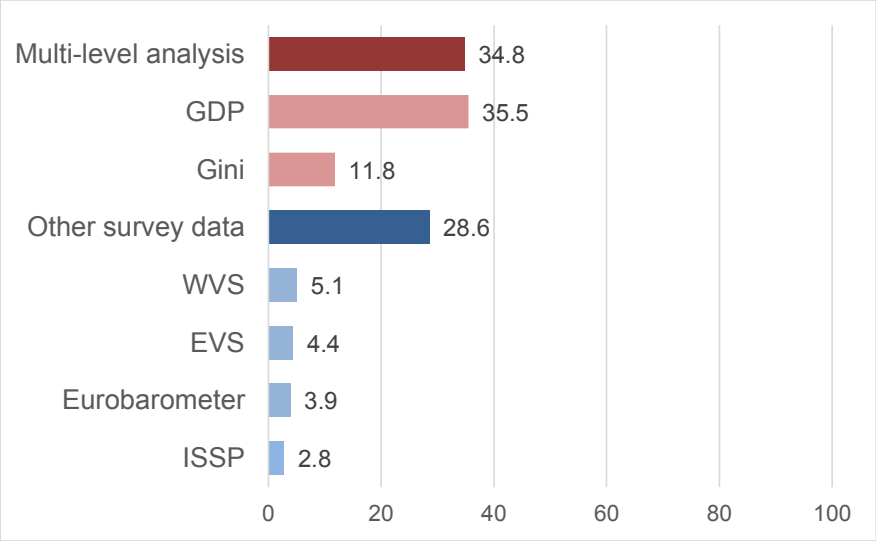

Figure 4: The share of *journal articles* containing macro and micro data and ML analysis (N= 2092)

The presence of **other micro data** is also significant, with 28.6% of ESS publications containing data from additional national, but more often other comparative surveys, or sometimes both. This combined usage of data from other comparative surveys is particularly important as it may provide feedback on conceptual gaps in the ESS indicators map. From the perspective of secondary analysts, the key aspect of data completeness is conceptual relevance. Data analytical and epistemological potential is primarily associated with how they are able to fill existing knowledge gaps, how they address them, which particular aspect (Müller-Bloch and Kranz 2015). Every analyst would choose a dataset based on its suitability in relation to their research question. However, any survey's conceptual range is necessarily limited, even more so in a cross-national design where "only certain subjects, and only certain aspects of those subjects can successfully be measured cross nationally" (Jowell

1998). Bearing this in mind, we examined whether analysts combine data sources more often when addressing some topics compared to others (Table 1).

Table 1 Combining micro and macro data sources across topics (N = 2789 ESS publications)

	Other survey micro data present (%) A.		Multi-level analysis used (%) B.
Topic[a]			
Religion, religiosity	51.7	Nation, ethnicity	48.0
Civil society, volunteering	44.4	Family, children, partners	41.5
Politics	38.4	Welfare	40.5
Economic issues	37.2	Immigration	36.4
Social capital	34.6	Health	36.2
Gender issues	34.4	Gender issues	33.1
Crime	31.8	Work, employment	31.1
Culture, values	30.9	Ageing, age groups	29.2
Welfare	30.5	Politics	28.7
Ageing, age groups	29.5	Social inequalities	28.7
Work, employment	29.4	Education	26.7
Nation, ethnicity	28.7	Subjective well-being	26.1
Subjective well-being	27.8	Religion, religiosity	25.4
Education	27.1	Culture, values	25.3
Family, children, partners	26.8	Crime	25.2
Social inequalities	25.9	Social capital	25.1
Immigration	24.1	Economic issues	24.8
Health	17.5	Civil society, volunteering	20.8
Total	*32.0*		*29.1*

[a] *Only topics with 100 or more publications are included. Up to 2 topics were coded per publication.*

The results indicate that analysts supplement ESS data with data from other surveys much more frequently when exploring topics in the top part of the column A., particularly *religion, citizenship* and *politics*, while ESS micro-data seems rather more self-sufficient in case of topics in the bottom part, such as *immigration* or *health*. Though there may be other factors involved, the pattern likely reflects ESS specific strengths and deficits in conceptual coverage and would probably be different to various degrees if we used similar bibliographic databases for other surveys.

On the other hand, the differential use of **multilevel analysis** (column B.) seems less related to a survey's conceptual characteristics and more to the nature of the topic itself, with national identity, work-life balance, welfare and immigration being more frequently analysed in interaction between individual-level and contextual conditions, such as national-level policies or institutions. In other words, this structure of causality makes some topics more reliant on the presence of high-quality comparable macro indicators than those which rely primarily on individual-level data explanations. Nevertheless, while certain subjects and

survey specifics seem to foster the use of multiple data sources to a considerable extent, the practice is present in at least a quarter of publications across almost every topic.

Another specific point of interest was the practice of combining ESS data with data from three other general purpose comparative surveys, *WVS, EVS* and *ISSP*. Among 4913 ESS publications there are 304 unique publications where ~~academic~~ employed this strategy. Specifically, the ESS bibliographic dataset contains 186 joint publications with WVS data, 149 with EVS data and 99 with ISSP data. In 72.7% of the cases ESS is combined with one survey, while in the rest of publications the data from two or all three are present. The 304 publications were open coded for motivations behind combining data and the exercise came up with six analytical reasons that by and large saturate the broad rationale behind these strategies (Table 2).

Table 2 Analytical reasons for combining ESS data with data from WVS, EVS and ISSP (%)

	WVS (N=166) [1]	EVS (N=81)	ISSP (N=57)	Total (N=304)
Reason for combining data [a]		(%)		
Combining concepts, indicators	51.8	64.2	43.9	**53.6**
Validation, robustness checks	34.3	27.1	43.9	**34.2**
Adding non-European countries	26.5	0.0	17.5	**18.1**
Adding time points	12.0	19.7	14.0	**14.5**
Pooling samples across surveys	1.2	9.9	5.2	**4.3**
Adding European countries	3.0	2.5	0.0	**2.3**

[a] All relevant reasons were coded for each publication.

Improving *conceptual coverage* and *validation* of findings are two most frequent motivations for using indicators from other comparative surveys, along with ESS data. This echoes the above mentioned limitations in the scope of subjects that can successfully be measured cross-nationally, as well as the significant potential for biases in cross-national research (Lyberg et al. 2018; Smith 2019). In about a third of cases, analysts combine comparative data to tackle issues of *geographic coverage,* mostly to add non-European regions into comparison, while in 15% of cases the rationale was adding *time points* or dimension. *Pooling datasets* and treating them as a single sample is the least frequent reason for combining data. The table also reveals specific complementarities between surveys, such as combining indicators being most frequent in ESS – EVS combinations and robustness checks in ESS – ISSP combinations, the two surveys that developed a number of similar thematic modules and seem to constitute the most suitable pair for verification of findings.

[1] 82 publications that include data from two or three surveys were assigned under only one (dominant) survey (for example, the combined WVS/EVS file use was assigned under WVS if it included non-European countries). This was done in order to not artificially boost all categories by counting a share of publications multiple times.

4 KNOWLEDGE PRODUCTION ACROSS ESS COUNTRIES

Another aspect of feedback which is particularly relevant for national founders (ESS GA) and national teams (NC forum) is the extent of **findings production** across ESS countries. This report only includes international publications and therefore presents only part of the picture, but it is a rather relevant part considering the premium status of international publications, journal articles in particular, in academic evaluation exercises.

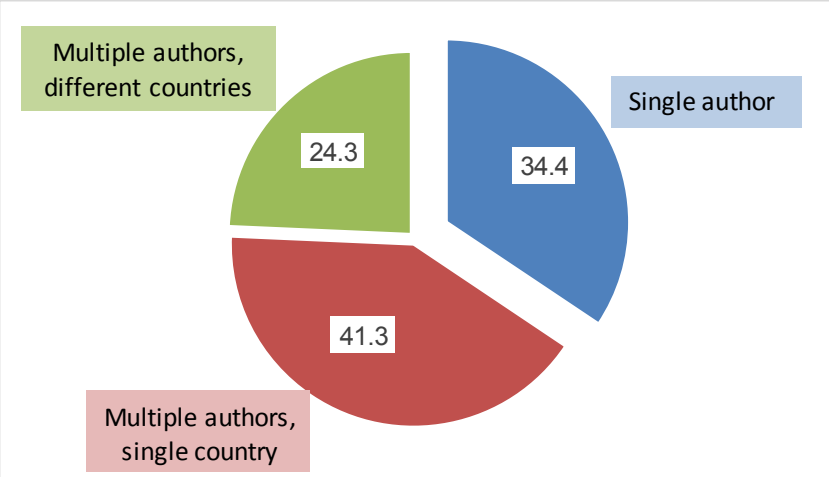

Figure 5: The pattern of national and cross-national authorships (N=2527 journal articles)

Table 3: Number of co-authored academic publications and registered users across ESS (2003-2019, N=4913), ESS archive user statistics (April 2020)

	N of Publi-cations*	All registered users**		N of Publi-cations*	All registered users**
UK	724	13854	**Greece**	67	1485
Germany	630	16810	**Russia**	60	3175
Netherlands	483	10006	**Czech R**	56	1290
Belgium	325	11886	**Slovenia**	43	4580
Spain	307	9617	**Romania**	42	1144
Sweden	291	4096	**Luxembourg**	38	211
Italy	256	6810	**Turkey**	33	1429
Switzerland	180	4914	**Slovakia**	29	490
Norway	167	7825	**Bulgaria**	23	529
Denmark	140	5067	**Lithuania**	19	1119
Portugal	139	3592	**Cyprus**	17	281
Finland	137	2910	**Ukraine**	17	1953
Poland	131	6799	**Iceland**	11	496
Ireland	109	2249	**Croatia**	8	366
France	107	5559	**Latvia**	7	350
Israel	96	1770	**Albania**	2	144
Estonia	89	2323	**Kosovo**	1	53
Hungary	81	2686	**Serbia**	1	158
Austria	75	3835	**Montenegro**	0	8
ESS AVERAGE	***130.0***	***3733***	***ESS AVERAGE***	***130.0***	***3733***

* Number of publications with at least 1 author from a respective country ** Registered users represent the most comprehensive category, including online analysis

Figure 5 first presents the pattern of national and international **co-authorships** based on ESS journal articles. The picture, which is probably not particularly specific to ESS compared to publications based on other comparative surveys, shows that the most common format for an ESS based journal article is national-level cooperation, i.e. two or more authors coming from the same country. This is followed by single authorships, while 24.3% of articles are written in cross-national cooperation.

Next, we examined ESS academic use across member countries. In order to obtain a more robust insight we combined two indicators, the number of publications from the Google Scholar study and the number of registered ESS users from the NSD archive (Table 3). Cells with above average numbers in either the authorship column or the registered users column are marked in blue and make it immediately obvious that larger wealthy countries with large scientific communities produce the lion's shares of publications and registered data users. Specifically, analysts from the **top five countries** author or co-author 2469 or 50% of all ESS publications and are, in absolute terms, the key source of ESS knowledge production. The column with registered users largely follows this pattern, with two smaller countries as outliers, particularly so Slovenia, mostly owing to the strong role of undergraduate and postgraduate teaching, as demonstrated by the Technopolis impact study (Kolarz et. al. 2017).

Considering that a country's capacity to generate academic publications and data users strongly depends on its size, we next standardized the usage numbers **per million inhabitants** in order to make **relative comparisons** and categorize countries under various 'usage profiles' based on six indicators: *number of rounds fielded, number of international publications* and *four types of registered users*.

Table 4: Group A – Relative high-performers *(data standardized per million persons)*

Country	Size[(a)]	Rounds[(b)]	Publi-cations[(c)]	Registered users [(d)]	Student users [(e)]	Faculty + PhD users [(f)]	Non-academic users[(g)]
Norway	5	9	33.4	1565	1241	208	115
Estonia	1.3	8	68.5	1786	1384	250	153
Slovenia	2	9	21.5	2290	1670	515	106
Belgium	12	9	27.1	990	822	115	53
Denmark	6	8	23.3	1013	665	106	73
Iceland	0.4	4	27.5	1240	873	248	120
Netherlands	17	9	28.4	588	460	97	43
Finland	6	9	22.8	485	314	112	59
Switzerland	9	9	20.0	546	404	113	30
ESS AVERAGE		***6.2***	***13.9***	***408***	***292***	***87***	***36***

[(a)] Population size in millions; [(b)] Number of fielded rounds; [(c)] Number of academic publications per million; [(d)] Number of registered users per million; [(e)] Number of student users per million; [(f)] Number of Faculty + Ph. d. users per million; [(g)] Number of non-academic users per million;

For each country, cells that show relative 'usage performance' that is well above the ESS average are marked *blue (high relative performance*) and cells that show performance well below it *red (low relative performance*), while white cells indicates middle range

performance. According to this method, ESS member countries ended up categorized into 4 groups (Tables 4-7), going from highest to lowest performing ones.

The highest performing countries, in relative terms, are **Group A** (Table 4) which mainly consists of small and medium size countries, mostly North and West European, but also two East European. With the stark exception of Iceland they are regular participants, having fielded (almost) every round, and are **well the above average in almost every category**. Their relatively small size and limited number of academic institutions seem to facilitate ESS visibility as the premium source for empirical research, teaching and policy analysis. All of these countries are (considerably) above the ESS average in shares of registered student and faculty users per million inhabitants. This, in the long term, may prove an essential way to organically promote ESS among researchers and non-academic users as they advance in their careers with the awareness of the ESS data and its online tools. In this view is seems quite essential for ESS to uphold and possibly extend existing user-friendly teaching and online tools which are used extensively among these categories of users. As noted, Iceland is an interesting outlier in terms of the low number of rounds fielded, which does not seem to affect other aspects of findings production and data use. A more qualitative approach would be needed to explain this case in more detail, but using proxy data from other countries in the Nordic region likely provided a large part of the explanation.

Table 5: Group B – Cornerstone members *(data standardized per million persons)*

Country	Size[(a)]	Rounds[(b)]	Publi-cations[(c)]	Registered users [(d)]	Student users [(e)]	Faculty + PhD users [(f)]	Non-academic users[(g)]
Luxembourg	0.6	2	63.3	351	118	133	100
Ireland	5	9	21.8	450	266	135	49
Sweden	10	9	29.1	409	294	85	31
Portugal	10	9	13.9	359	170	172	37
UK	68	9	10.6	203	128	52	24
Hungary	10	9	8.1	268	178	68	24
Austria	9	8	8.3	426	311	82	33
Spain	47	9	6.5	204	125	60	20
Germany	84	9	7.5	200	144	44	12
ESS AVERAGE		***6.2***	***13.9***	***408***	***292***	***87***	***36***

Group B (Table 5) consists of some of the key ESS countries, mostly consistent participants and academic powerhouses (UK, Germany, Spain, Sweden). Their larger size means their academic landscape is more complex, with more alternative (data) options available and less possibility to 'dominate it' in the same way this may be possible in smaller countries. Nevertheless, many of these countries produce **largest absolute shares of ESS academic outputs and data users**. Along them, there are also a few academically well performing smaller countries (Ireland, Sweden, Portugal). Similarly to Iceland, Luxemburg is a considerable outlier in terms of fielding frequency, but its publishing and usage figures are still very strong. Again, the fact that both countries are very small, wealthy and similar to other participating countries from their region, which analysts can use as proxies, likely compensates for their missing national data.

Table 6: Group C – Relative underperformers *(data standardized per million persons)*

Country	Size[a]	Rounds[b]	Publi-cations[c]	Registered users [d]	Student users [e]	Faculty + PhD users [f]	Non-academic users[g]
Lithuania	3	**6**	6.3	373	264	79	31
Cyprus	1.2	5	**14.2**	234	103	**90**	**41**
Israel	9	**6**	10.7	197	122	59	16
Greece	10	4	6.7	148	71	49	29
Latvia	2	4	3.5	175	108	45	23
Poland	38	**9**	3.4	179	129	35	15
Czech R	11	**8**	5.1	117	73	34	11
Italy	60	5	4.3	113	73	33	6
Slovakia	5	**6**	5.8	98	52	34	12
France	67	**9**	8.2	83	56	19	8
ESS AVERAGE		***6.2***	***13.9***	***408***	***292***	***87***	***36***

Group C (Table 6) consists of Eastern and Southern European countries, most of which had some issues with consistent participation (in particular Italy, Greece, Latvia, Cyprus). However, as noted, the number of rounds fielded does not always define other aspects of data use and findings production. While Luxembourg and Iceland show strong academic usage despite small number of rounds fielded, this group includes three opposite cases, i.e. some very consistent participants (France, Poland, Czech), with relatively low or below-average numbers of publications and data users. Again, a more qualitative approach would be needed to determine why specifically this is the case as the **potential for improvement** seems considerable, given the richness of their national ESS data series. In France in particular, low relative numbers of student and academy users may be the key weakness that prevents gradual organic spread of ESS awareness into other usage groups, which seems to be the case in group A.

Table 7: Group D – Struggling and recent members *(data standardized per million persons)*

Country	Size[a]	Rounds[b]	Publi-cations[c]	Registered users [d]	Student users [e]	Faculty + PhD users [f]	Non-academic users[g]
Russia	146	5	0.4	22	16	5	2
Bulgaria	7	5	3.3	76	40	25	11
Ukraine	44	5	0.4	44	31	10	4
Croatia	4	3	2.0	92	40	42	10
Romania	19	3	2.2	60	31	24	5
Turkey	84	2	0.4	17	10	6	1
Albania	3	2	0.7	48	13	25	9
Kosovo	2	1	0.5	26	6	13	9
Serbia	9	1	0.1	18	8	8	1
Montenegro	0.7	1		11			
ESS AVERAGE		***6.2***	***13.9***	***408***	***292***	***87***	***36***

Finally, the mostly 'red zone' **Group D** (Table 7) consists of poorest Eastern European countries with largely **sporadic fielding frequency or recent membership**. Their low academic and data use performance can be speculatively explained by factors such as lack of national datasets (though less so in cases of Russia, Bulgaria and Ukraine), the presence of a longer-running alternative comparative datasets, such as EVS and ISSP, as well as – perhaps primarily – by the general financial and regulatory characteristics of the social science and educational systems in these countries, with less pressure to international publishing and less frequent empirical courses at universities. In any case, **teaching and drafting student users** could be the first step towards better proliferation of the ESS data use.

To sum up, high number of fielded rounds is a necessary, though not always sufficient, precondition for high academic outputs. Implicitly, high number of fielded rounds is also related to the meta-explanatory factor of country's wealth, which brings along stable funding and larger investments in science and education in general. This typically results in higher numbers of registered users and, given that academia and students are by far the largest group of data users, higher numbers of academic publications.

5 THE USE OF COUNTRY DATA

Analytical use of national data is of course the final aim of each national fieldwork action. But while national academic communities are the primary target, from an individual country's perspective, in most cases it is the **international academic community** that makes the most use of national datasets once they become part of the ESS cumulative data file and contribute their part to its comparative scope. The statistics on the national data use thus provides information on the scope data use, as well on analysts' priorities in including individual countries. Figure 6 presents the shares of national data inclusion for all countries that participated in at least one ESS round and reveals large differences, with inclusion shares ranging from 75% for Germany and less than 5% for Albania and Kosovo.

The chart indicates that the main explanatory factor for high data inclusion is, quite expectedly, **consistent participation** which results in a larger number of country-wave datasets. On top of the chart are countries that fielded the first 7-8 rounds relevant for publishing, while the bottom part consists of countries that have fielded only a few rounds. Consistent participation is essential not just for the national science communities, but equally so for international analysts, as it expands comparative scope and analytical possibilities, increasing data user value.

As noted in previous reports, there are other factors that affect inclusion rates, best demonstrated by the fact that national data use may differ considerably for countries with a similar number of rounds fielded. The data for Hungary and Slovenia, for instance, with all rounds fielded, are included in about 20% less publications than the data for Germany. The opposite cases are Greece, Italy and Luxembourg, with relatively high inclusion rates comparative to the number of rounds fielded. The two secondary factors that define inclusion are primarily **authors' affiliations** and **country typology**. Authors typically address issues that are relevant in their own countries and analyse them on sets of countries that are reasonably similar and where the same issues are present. As a large majority of authors

come from Western European countries this is often reflected in their preference towards selecting other western European countries, addressing shared issues such as immigration related problems, political populism or welfare chauvinism.

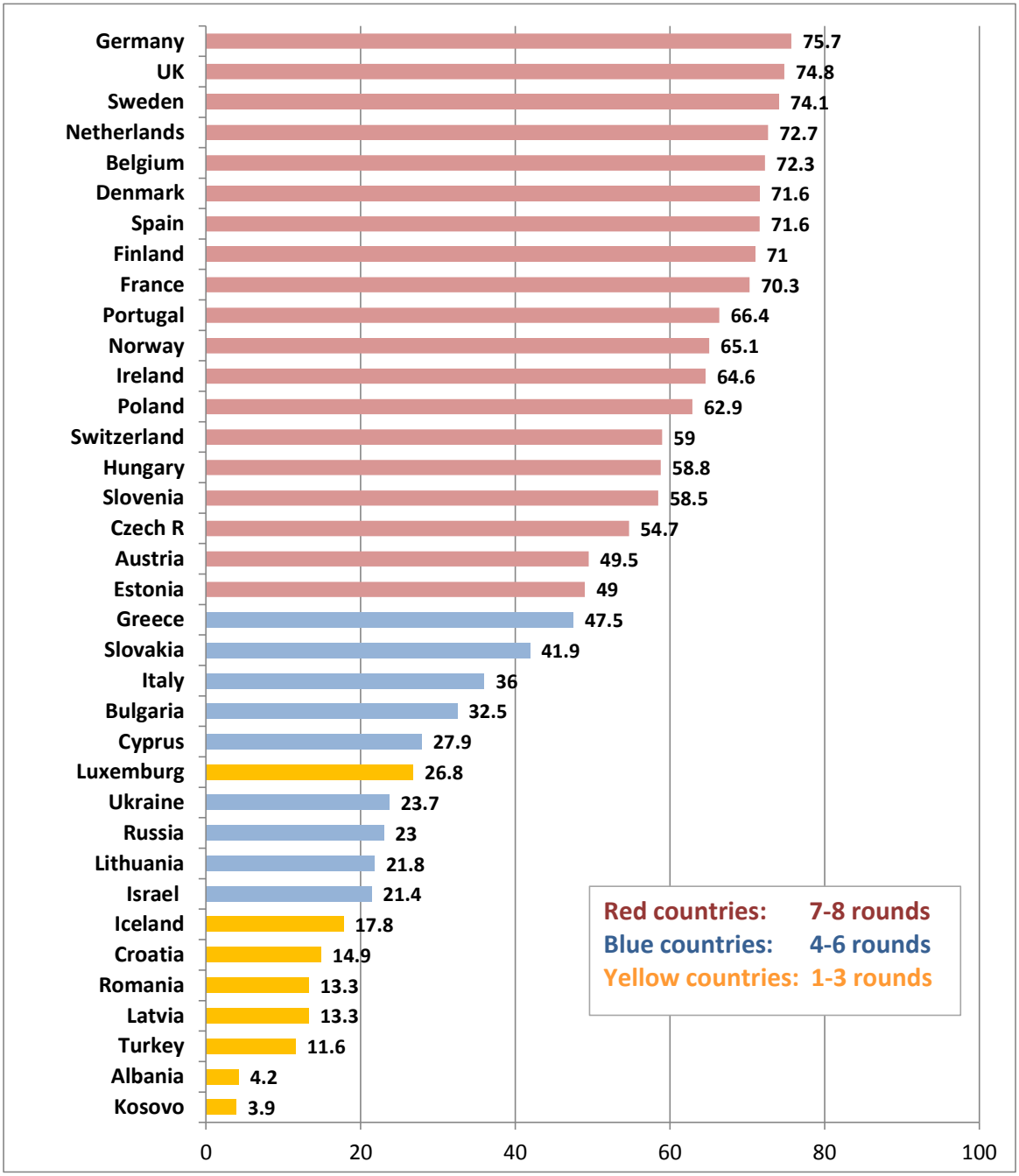

Figure 6: Country data inclusion rates (2003-2019, N=3266)

Another factor, particularly in the light of extensive multi-level analysis, is the **(non)availability of standardized macro indicators** which may negatively affect the inclusion of national datasets from countries that are not part of associations such as EU or OECD (Switzerland, Norway, Russia, Ukraine, Romania, Bulgaria etc.).

6 THE EXTENT AND DYNAMIC OF ROTATING MODULES USE

Questionnaire content, from individual items, blocks of items and modules, is any survey's essential parameter, **defining its analytical possibilities**, i.e. the scope of topics and theoretical approaches, types of academic communities engaged and similar. In the 2020 report, the use of questionnaire sections is based on 3266 downloaded publications, with the minimum criterion for the module use being at least 1 item found. In a small number of publications the authors failed to provide sufficient information to identify the use of any items (13 such cases in the 2019 batch), or provided only partial information which prevented us from identifying all the items used. The possibility to identify the complete set of items is by far the best for journal articles, even though there are a growing number of those that put this information in an online appendix which is sometimes missing. However, the extent of this problem is small and does not affect the overall item count across articles in any significant way. The picture is much more incomplete for the poorly accessible publications such as books and book chapters, though we may tentatively assume that the use of items and modules in other types of publications broadly follows the patterns in journal articles. For these reasons we use *journal articles* as the basis for most of our module and item use analysis, considering that this count is the most accurate and robust. Items used are, in most cases, listed in the *Data and methods* part of the articles, otherwise they are identified from tables, appendices and the text itself.

Figure 7 presents the general picture of usage split for the substantive **ABC Core and rotating modules** in journal articles. About 50% of ESS publications include only ABC Core substantive items, while about a third includes a mix of ABC core and module items. The smallest share (18%) represents publications that only use module items, often combined with F section, and no ABC core items.

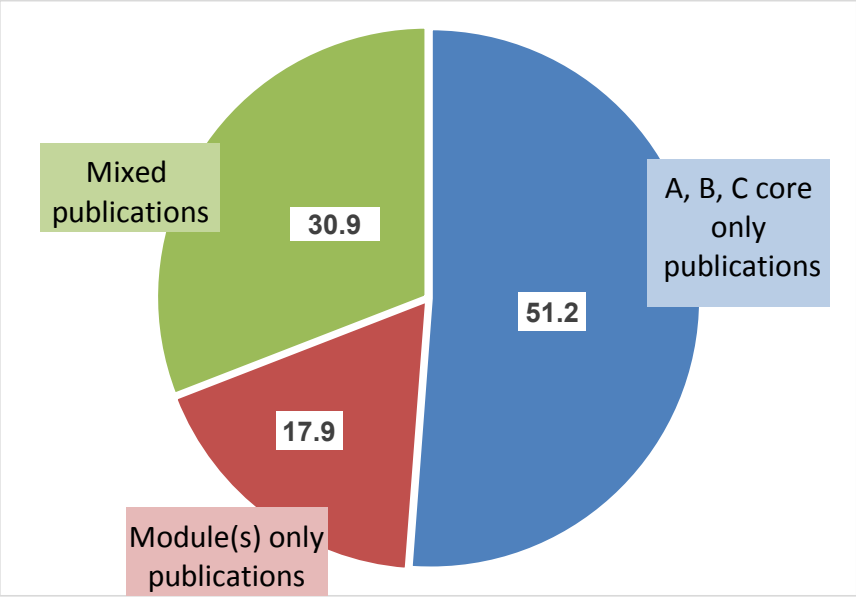

Figure 7: The A, B, C core and modules usage shares (N = 2107 journal articles)

While the demographic F section is not included in the item use count, there is a small sub-group of publications that use only F block items, most often addressing issues related to mobility, or income and educational differences.

The fact that the **ABC core** items are used considerably more that rotating items is not surprising, owing to their wide conceptual relevance and biannual fielding frequency which results in a continuously refreshed time-series. Both these factors make the ABC core section the most relevant part of the questionnaire in terms of trend analysis, cross-round merging, increasing sample sizes etc.

Figures 8 and 9 focus specifically on the use of **rotating modules** and the Human values scale. *HVQ* or its parts are used in 13.6% of ESS publications, while the list of most popular rotating modules is by now firmly established: *Immigration* and *Work & Family* are the two leading ones in terms of usage, followed by *Welfare* and *Wellbeing*. *Citizenship* still looks strong, but only owing to its past use which has now dried up due to its aged dataset. It is, of course, very likely that in case this module were repeated, particularly its battery of respondents' engagement with voluntary organizations which taps into the widely explored concept of social capital, its usage would rapidly expand, including the original round. As pointed out in several reports, failure to repeat this hugely popular part of the citizenship module continues to be one of the missed opportunities for the ESS, considering the salience of the citizenship-related concepts in ESS publications.

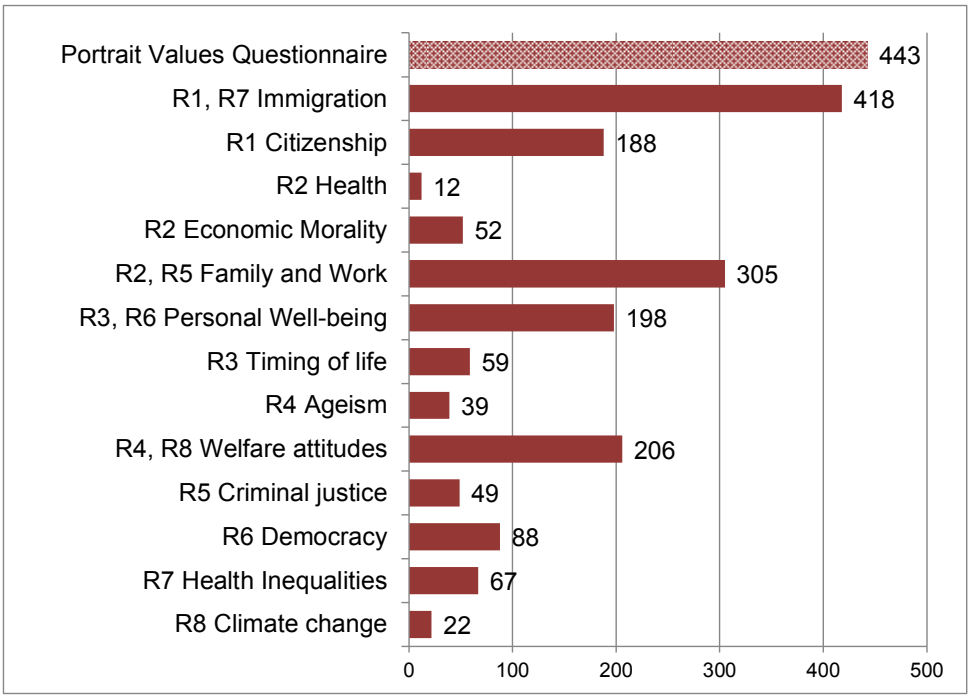

Figure 8: The use of ABC Core and rotating modules (2003-2019, N=3266)

Other modules are used less frequently either because they thematically engaged a narrower academic audience in the first place *(Economic morality, Timing of life, Ageism* and *Criminal justice*), or because they are still fairly recent and have not yet reached their publication peak, which happens to be about 5 years after the first dataset is issued (*Climate change* and, to some extent, *Health inequalities*).

Figure 9 presents the picture of modules usage for the most recent complete publishing year, which is 2019. The two most used modules in the last year's publications were *Immigration* and *Welfare*, whose repeat modules are also the most recent among the published ESS datasets. Immigration was re-fielded in 2014 and its first data edition issued in

2015, while Welfare was re-fielded in 2016 and issued in 2017. Considering that 4 to 5 years after its first publication a dataset reaches its prime publishing period we can expect strong Welfare use for 2 or 3 more years. The immigration module continues to be relevant also due to a battery of items extracted from it which are now part of the ABC core. A step behind them were *Family* and *Wellbeing* modules while the *Climate change* has only just begun its publishing life and its solid presence in 2019 articles suggests it may become one of the most popular modules in the future. Its use is also likely to be boosted by the set of items which were included into the ABC core part after the latest revision.

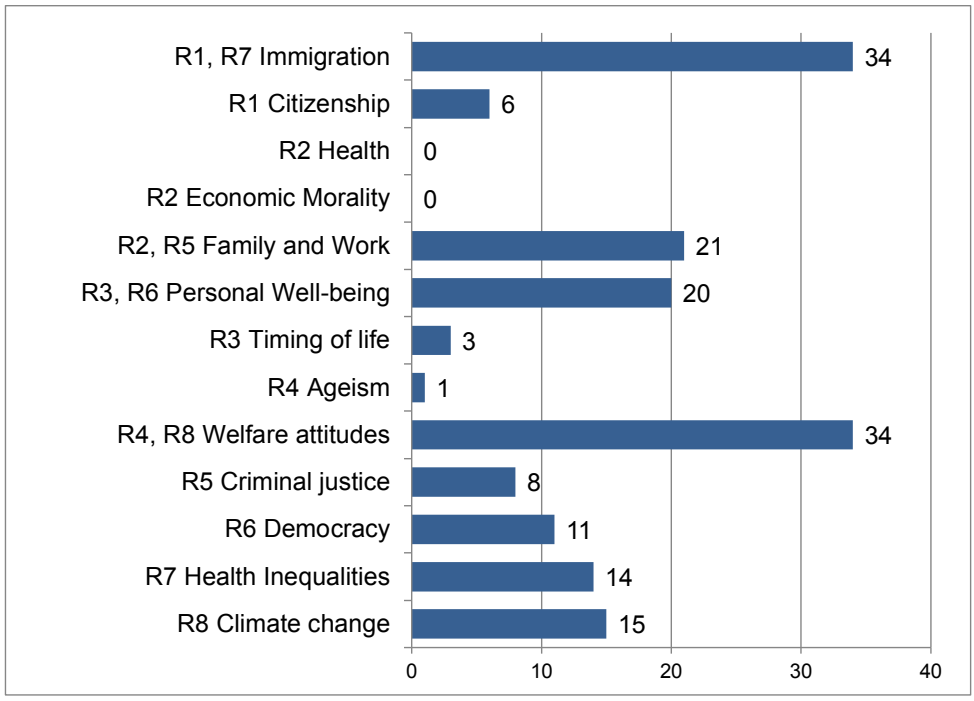

Figure 9: The use of rotating modules in 2019 (N=444)

In sum, while the publishing life of many modules is cyclic, with their use 'revitalised' to various extents with each repeat module, **the use of early one-time modules** gradually dries up, due to data aging. Adding a fresh time point is the only way to boost the analytical value of the original measurements – besides the above mentioned case of Citizenship, R2 Health, Economic morality and Ageism modules also fall into this category. However, unlike the Citizenship module these modules lacked a similar set of popular items, so it is a matter of judgment in which cases this would make analytical sense. Nevertheless, ESS could consider repeating parts of successful one-time modules to revive them from their current 'zombie-like' state where their relevance has been reduced to largely historic aspects.

7 ASSOCIATIONS BETWEEN ABC CORE ITEMS AND RESEARCH THEMES

Individual items are the smallest questionnaire units and along with item pre-testing and post-testing, item usage monitoring is one of the key information sources in the process of questionnaire refinement (e.g. reviewing the ESS core, designing repeat modules). While full item usage statistics that includes rotating module items is available in *Appendix 2*, this section will specifically examine associations between the most used items in the ABC core section and modules or topics.

Table 8 first presents the **most used ESS items from the ABC core** part, found in at least 8% of ESS based journal articles (as noted, compared to other types of publications journal articles provide the most complete picture due to higher accessibility and stricter reporting). The most used attitudinal item is *generalized trust* present in 16.4% journal articles, closely followed by *left-right scale* and *subjective health*. Generally, the most used items cover the concepts of social and political trust, immigration, subjective well-being and political participation. In addition, there is religiosity, which can tentatively be considered a half-demographic concept.

Rank	Variable	Label	%
1	PplTrst	Trust in people	16.4
2	LRScale	Left-Right scale	15.2
3	Health	Subjective health	14.2
4	TrstPrl	Trust in parliament	12.9
5	BrnCntr	Country of birth	12.9
6	STFlife	Satisfaction with life	12.4
7	RlgDgr	Degree of religiosity	11.9
8	ImUEclt	Immigrants undermining culture	11.1
9	ImBGEco	Immigrants good-bad for economy	9.8
10	RlgAtnd	Religious attendance	9.7
11	TrstLgl	Trust in legal system	9.6
12	ImWBcnt	Immigrants make country worse-better place	9.4
13	SclMeet	Frequency of social meetings	9.0
14	Polintr	Interest in politics	8.7
15	Happy	Happiness	8.6
16	TrstPlc	Trust in police	8.3
17	STFdem	Satisfaction with democracy	8.3
18	Vote	Voted in last election	8.0

Table 8: ABC core items with 8% or larger usage share in journal articles (N=2016)

Associations between modules and core items

Table 9 presents examples of relationships between 14 popular ABC core items and five strongly used modules, revealing how these items are used disproportionately often in combinations with some modules. To better highlight patterns of association, cells with items that are used in more than 20% of publications based on a particular module are shaded dark red, and those used in more than 10% light red.

Table 9: Examples of associations between modules and ABC core items used in 2042 journal articles

	MODULES					
ITEMS	**Well-being**	**Immi-gration**	**Welfare**	**Demo-cracy**	**Work-family**	**All**
Satisfaction with life	31.4	6.4	7.2	10.5	12.0	12.4
Subjective health	29.4	3.0	7.2	5.3	11.5	14.2
Happiness	26.8	3.8	2.9	7.0	9.1	8.6
Trust in people	22.2	17.8	13.8	15.8	5.7	16.4
Social meetings	23.5	6.8	0.0	5.3	5.7	9.0
Immigrants – culture	4.6	55.3	19.6	5.3	1.0	11.1
Immigrants – country W/B	5.2	42.8	14.5	8.8	3.3	9.4
Immigrants – economy	5.2	48.1	10.9	3.5	1.0	9.8
Reducing income differences	2.0	11.0	22.5	15.8	2.4	6.6
Left-right scale	2.6	33.0	28.3	43.9	3.3	15.2
Satisfaction with economy	5.2	12.9	3.6	28.1	4.3	7.4
Interest in politics	3.9	7.2	3.6	38.6	1.9	8.7
Satisfaction with democracy	6.5	7.6	8.7	35.1	5.3	8.3
Satisfaction with govern.	5.9	6.4	3.6	21.1	2.9	6.1

The **pattern of associations** is quite clear and mostly predictable. Different modules associate with the attitudinal ABC core in specific ways, with some items carrying much bigger weight than others, depending on a module's main theme. Examples include *subjective health, life satisfaction* and *happiness* items in relation to the *Wellbeing* module, or *political trust* and *political satisfaction* items in relation to the Democracy module and so on.

However, there are also less obvious associations which often arise from analysts addressing sub-topics or issues that combine elements from two or more thematic domains. For example, while the *left-right* self-placement item is extremely important in combinations with the *Democracy* module, it is also among key items for publications using *Immigration* module due to associations between political populism and immigration attitudes, as well as *Welfare* module where redistribution attitudes or welfare chauvinism are one of the key ideological cleavages. Similarly, the *generalized trust* item is used strongly not just in publication including Wellbeing module, but in publications using four out of five listed modules. This **multiple relevance** seems to explain why these items are on top of the usage list. *Family module* is a contrasting case, relying more on its own items and the F section lacking, similarly strong associations to attitudinal ABC core items, with the partial exception of two items tapping the concept of subjective wellbeing.

Associations between topics and core items

As the number of modules is relatively limited, we further examined associations between items and topics to gain additional insight into the most used items' **sources of relevance**.

Table 10: Examples of strong associations between topics and ABC core items in 2042 journal articles

ITEMS	*TOPICS*					
	Social capital (127)	**SWB*** (216)	**Health** (219)	**Immi-gration** (344)	**Politics** (506)	**Inequa-lity** (165)
Trust in parliament	28.7	8.3	4.1	9.3	26.5	15.2
Trust in people	71.3	19.9	12.3	17.2	14.8	13.9
Trust in legal system	30.9	8.8	3.7	6.7	15.2	12.1
Trust in police	27.5	7.4	4.1	6.4	11.9	7.9
Frequency of social meetings	36.5	22.2	16.0	5.8	6.1	11.5
Satisfaction with life	14.0	68.1	6.8	9.9	5.9	9.7
Happiness	10.7	53.7	7.8	5.5	2.0	9.1
Subjective health	16.3	47.7	57.5	7.0	2.8	15.8
Country of birth	13.5	13.4	12.3	41.9	6.5	13.9
Immigrants - culture	7.3	2.3	0.9	34.6	14.2	11.5
Immigrants - economy	7.9	2.3	0.9	34.0	10.3	8.5
Immigrants country W/B	9.6	2.3	0.9	30.2	10.1	10.3
Left-Right scale	11.2	3.7	2.3	25.6	28.7	12.1
Interest in politics	4.5	0.5	1.8	6.1	26.5	6.7
Satisfaction with democracy	5.6	6.9	0.9	4.9	21.1	10.9
Voted in last election	4.5	0.5	2.9	4.1	27.1	13.3
Degree of religiosity	12.4	18.1	5.0	17.7	12.5	7.3
Religious attendance	16.9	9.3	3.7	10.8	10.1	6.1
Reducing income differences	1.1	1.9	0.5	5.5	12.3	12.1
Signed petition	10.7	1.9	0.9	2.0	17.0	8.5
Member of discriminated group	5.6	7.4	6.8	13.1	3.2	4.8

* Subjective well-being

Table 10 presents six popular topics where ABC core items are strongly present in analytical models, while Table 11 presents cases of another six topics where the associations are somewhat lighter. Like before, patterns of **item-topic associations** vary with respect to its strength and the number of topics where an item is prominent. Four items in particular – *generalized trust, life satisfaction, happiness and subjective health* – are used overwhelmingly in publications addressing their 'home domains', i.e. social capital, subjective wellbeing and health. These items seem to measure the key concept extremely efficiently, with their explanatory potential demonstrated by thousands of publications, rendering them almost indispensable when analysing their primary topic.

However, their explanatory relevance extends far beyond their own domain, which explains their widespread use and turns them into a sort of '**super items**'. For example, the **trust item** figures strongly in topics such as citizenship, where social trust is a key determinant, economy (Table 11) where authors typically include it their models as a social indicator among economic indicators, well-being and others. There is a multitude of topics where generalized trust is present in more than 10% of respective publications, which makes it the most used ABC item overall.

Table 11: Examples of mild or weak associations between topics and ABC core items (N=2042 downloaded JAs)

	TOPICS					
ITEMS	**Economy** (215)	**Crime** (101)	**Gender** (116)	**Age** (137)	**Work** (245)	**Family** (148)
Trust in people	22.8	17.8	3.4	7.3	6.5	1.4
Trust in police	10.2	26.7	2.6	2.9	0.4	0.7
Safe walking after dark	1.4	22.8	3.4	4.4	0.4	0.0
Gay people to live as they wish	0.9	1.0	25.0	0.7	0.8	0.0
Subjective health	7.0	6.9	8.6	26.3	14.7	6.8
Left-Right scale	14.0	8.9	12.1	4.4	9.4	1.4
Trust in parliament	16.7	14.9	3.4	5.8	2.4	0.7
Trust in legal system	12.6	15.8	3.4	2.9	0.8	0.7
Satisfaction with life	10.7	3.0	6.0	16.8	11.8	10.8
Country of birth	7.0	10.9	12.1	4.4	13.9	6.1
Degree of religiosity	8.4	7.9	14.7	5.1	8.6	10.8
Religious attendance	4.7	2.0	16.4	2.2	5.7	8.8
Frequency of social meetings	7.9	5.9	1.7	13.1	2.0	4.1
Happiness	7.9	6.9	2.6	10.2	6.9	7.4

Most of the highly used items show similar multiple relevance. The **left-right item** has strong usage shares in publications addressing at least ten popular topics, demonstrating multiple associations between political attitudes and many social issues. **Self-assessed health** is used in 57% of publications addressing health topics and almost half of those addressing personal wellbeing, which is expected. Yet its usage shares are also large in publications analysing age groups, social capital, inequality and work. **Life satisfaction** too is used significantly (above 10%) across a number of topics, besides being the key subjective well-being item, along with happiness. Finally, **trust in national parliament** is the most used item from the heavily used battery of political trust items. Surprisingly, politics is not the topic where its usage share is largest, but rather social capital. Political trust is also strongly used in relation to the topics of economy, citizenship, crime, welfare and others.

Nevertheless, while topics like politics, social capital, inequality or immigration rely strongly on ABC core items this is somewhat less the case for topics in Table 11, which show fewer strong associations with ABC core, particularly so work and family, replicating the picture from the modules table. As noted, these topics rely more strongly on the F part, which is mostly the effect of the ABC core conceptual structure, that focuses more on the domains such as politics, subjective well-being, social capital and similar. With the inclusion of small thematic batteries such as immigration or climate change though, the association between ABC core and respective topics becomes much stronger.

In sum, this kind of feedback, along item usage numbers, provides insight into the scope of core items' relevance for different academic communities and topics, some of which may have been foreseen by the core questionnaire design teams, and some not. It informs the CST and SAB when making core questionnaire revisions, as well as rotating module QDT's that gain insight into the most used concepts related to their thematic areas.

8 THE CYCLE OF ROUNDS USE

ESS is a longitudinal survey with a time-series spanning over an increasingly long period. Rounds usage statistics shows which data waves are used most frequently and how many are typically used. It provides insight into the complex process of **data ageing** which simultaneously increases and decreases its analytical value, depending on analytical aims.

Data on the use of individual rounds was obtained from 3261 downloaded publications, excluding a small number of publications where authors failed to provide enough information to identify the exact rounds.

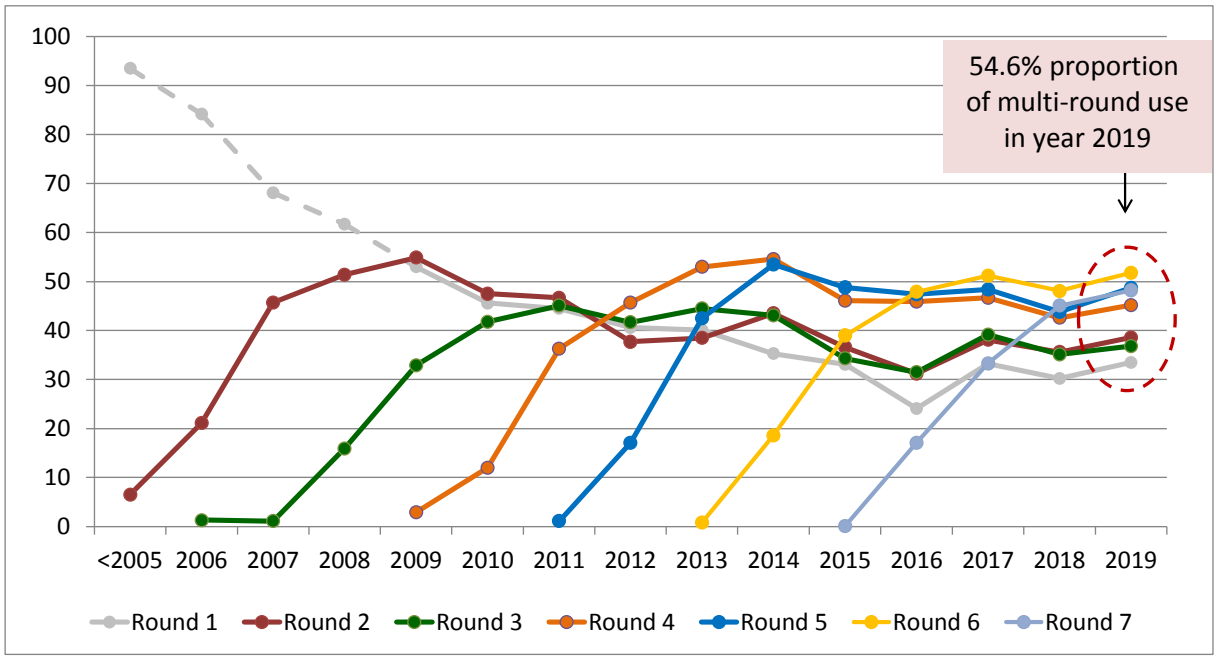

Figure 8: The cycle of rounds use in ESS publications (2003-2019, N=3265)

Figure 8 that presents the **cycle of rounds use** reveals a remarkably steady pattern. When the first dataset is issued for the latest round, a small number of publications emerge within a year, usually conference or working papers. In the following years the number of publications using the latest round increases steeply, peaking about 4-5 years later. Each round's usage then begins to stabilize at about 35-55%.

The continuous use of earlier rounds is driven by widespread **multiple-round use**, with analysts either making cross-time comparisons but more often pooling rounds to increase sample sizes, or both. When the main aim is increasing sample sizes, multiple rounds use is mostly focused on the ABC core part. A considerable share of publications uses almost all available rounds – for example, in the publishing year 2019, 23.5% of publications used 7 or 8 available rounds – but if authors decide to pool only a few rounds, they would usually chose the most recent ones. Repeat modules primarily offer possibilities for cross time comparisons, though such comparisons are a frequent strategy also in the case of ABC core cross-wave use. While the strategy of enlarging samples by using multiple rounds may favour more recent datasets, which are more comparable in terms of social context and surveyed population, the value of earlier rounds will continue to increase in cross-time

analysis. As a result of both strategies **all ESS rounds are still being used extensively**, though not necessarily all questionnaire parts.

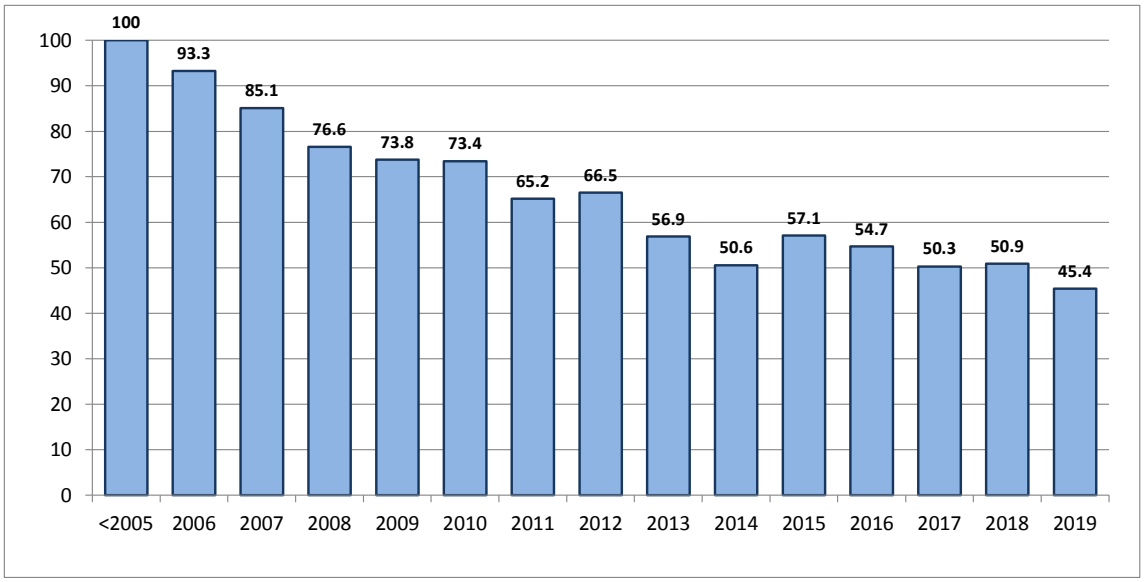

Figure 9: Trend of publications using a single round (N=3261)

Figure 9 presents the decreasing shares of single round use. Overall, 58.8% of publications used one round in their analysis, but these publications were a minority in the publishing year 2019 where 54.6% of publications used multiple rounds. In the ten year period between 2005 and 2014 when the number of ESS datasets began to increase, multiple round use increased significantly and reached about 50% where it now seems to fluctuate. Without doubt, ESS **cumulative data wizard** contributes considerably to this trend, greatly facilitating the customized formation of multiple-round datasets.

9 ANALYTICAL FEEDBACK

Besides bibliographic variables in the narrow sense such as topics, authors' affiliations, publication types or the use of questionnaire parts, ESS annual monitoring exercise includes a number of para-bibliographic variables, some of which provide feedback on methodological features or, more specifically, the level of **methodological awareness** among ESS based authors. This aspect seems relevant considering that ESS was created with a specific aim to overcome long-lasting methodological deficiencies in comparative research so it is interesting to see if this methodological concern is, indirectly, reflected among ESS based authors.

In relation to this issue an interesting article was recently published, discussing whether cross-national studies disclose enough information for independent researchers to evaluate the validity and reliability of their findings (Damian et al. 2019). It identifies two models of responsibility, first the *individualistic model* which puts full trust in researchers to keep detailed accounts of their research process and to disclose any additional information on request. Alternatively, in the social or *community model*, journals—as representatives of the scientific community—should require authors to place the data and replication documents

in the public domain. The article present checklists of things authors should include to allow replication, from survey name to survey waves used, dataset version, response rate, weighting, detailed item description and others. Generally, they find that more than 50% of articles provide the number and list of countries included, the sample size and the description of variables (items and scales), while other aspects are covered to a far lesser extent. They, for example, find that 28.5% of articles describe weighting procedure and 9% state response rate.

ESS indicators provide a fairly similar picture. A vast majority of ESS based publications provide information on survey years used, the countries included and more or less complete description of items and variables used. As to other replication information, it is similarly incomplete. As shown in Figure 10, data file edition is cited in 25.7% of journal articles and references to the use of weights were made in 35.6% of articles (which does not necessarily imply an elaborate description), while referring to the ESS response rate was less common (17.7). In 41.4% of the articles a reference was made to ESS web pages, which is not directly an indicator of methodological awareness, but implies more careful writing and provides some insight into its visibility and usage.

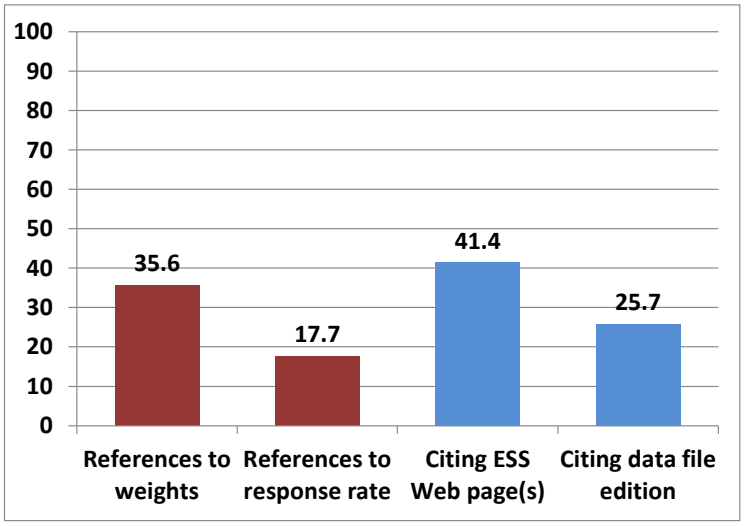

Figure 10: Indicators of methodological awareness and replication (N=2076 – journal articles)

Figure 11 presents a summary picture of authors' methodological awareness, measured by an index constructed from three indicators: citing *response rate, weights use* and *file edition*. It shows (blue fields) that in the majority of ESS publications at least 1 'quality awareness indicator' was found, while in about 20% two or three were present. This leaves about 45% of publications where neither references to response rate, or weight use or, file edition were provided. Of course there may be issues with replication also with publications that did provide one or more methodological references, but likely more so with those that provided none.

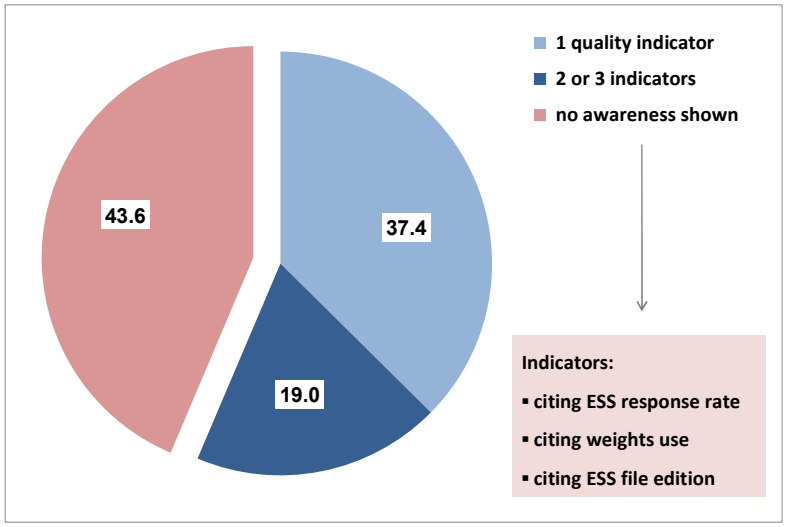

Figure 11: Methodological awareness among ESS authors (N=2107 journal articles)

Regarding the *community responsibility model*, ESS bibliographic data offer a limited but interesting opportunity to examine differences in the level of pursuing this goal across journals from different disciplines. Figure 12 thus compares the index in five groups of journals containing largest numbers of publications based on ESS data: general sociology (476), economy (179), politics (407), Health & medicine (148) and psychology (130).

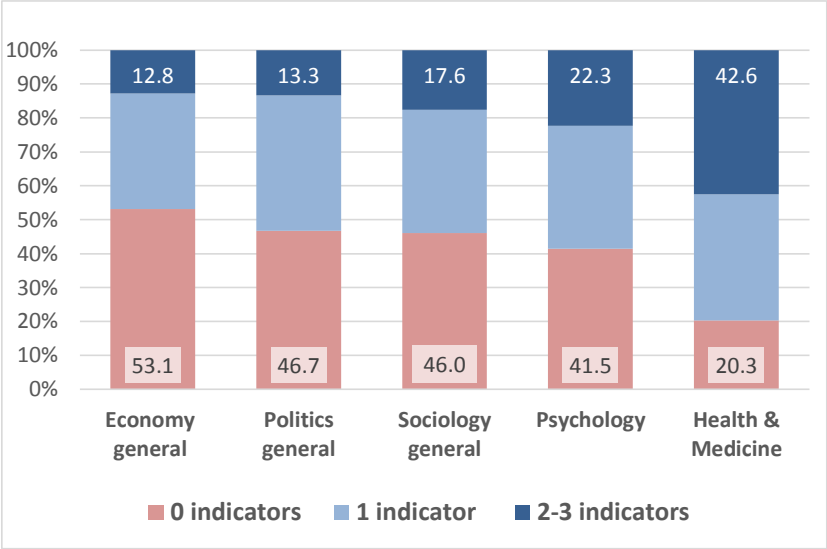

Figure 12: Methodological awareness across five journal domains (N=1340 journal articles)

While our methodology is rather ad hoc, it still provides an indication of differences in **community responsibilities**, with the biggest positive outlier being Health & Medicine journals. As shown by the chart, journals from this field deviate quite strongly from the other four groups, with 80% of their publications containing at least one of the three methodological indicators, while the share in the economic journals on the other end is 47%. Of course medical research has a long tradition of methodological strictness and rigour, mostly due to its highly sensitive nature and some notorious mistakes in the past. However, considering the general trends in the area of research ethics such as the FAIR principle for scientific data management, it is likely that this culture is soon going to prevail also in other fields (Haggerty 2004; Whittaker 2005), making replication of results easier and more widespread in general.

10 INFORMING POLICY

Considering that informing policies is generally regarded as the expected type of **societal impact** in social science research and has, as such, become a standard feature in evaluation exercises, ESS annual bibliographic reports include two general, yet robust indicators of this component. The first one is the number of keywords *'policy'* or *'policies'* in the body of the text, which indicates the 'intensity' of authors' policy orientation, and second, the *type of policy* that is mentioned.

Figure 13 shows that **references to policies** are made in almost 80% of ESS based journal articles, the publication category selected for our analysis due to its wide accessibility and standardized format. In almost 57% of articles references are made to specific policies, most often *welfare, immigration* and *economic policies*.

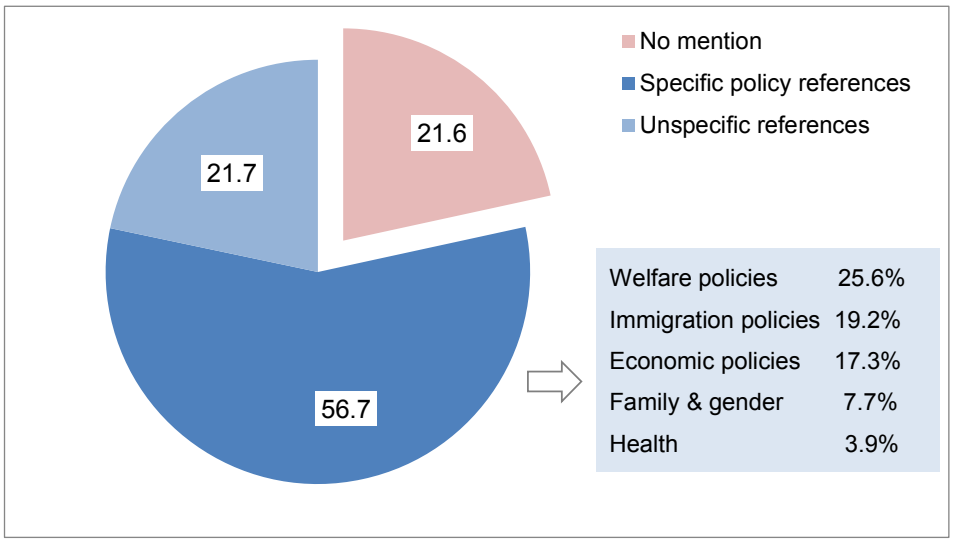

Figure 13: T Policy references in ESS journal articles (N=2107)

Understandably the extent of policy referencing depends on the main topic addressed in journal articles (Figure 14). Articles discussing welfare have the highest average number of policy references by far, which is not surprising considering that welfare arrangements and welfare state, dealing with the societal redistribution of wealth, are one of the most diverse, controversial and intensely regulated policy areas. There are a number of other topics where the average number of policy references is high, suggesting they are also subject to diverse and often disputed policy solutions, such as *immigration policies, family and labour market policies,* or *gender and environment policies*. The lowest numbers of policy references were found in articled discussing issues that are not usually regulated by the state such as culture or social capital, or this regulation seems less controversial and rather stable across most countries (religion, media).

Generally speaking, informing policies seems to be a relevant dimension both in the authors' choice of topics and when drawing conclusions from their studies. At least to some degree, most authors seek to pursue the 'solutionist' dimension of research (Prenzel 2016) by highlighting **policy implications of their findings** and putting them in the context of societal issues, not least in order to highlight the wider relevance of their research. In this context a new challenge emerges, namely that of exploiting the growing mass of now fragmented

policy relevant evidence from hundreds of comparative studies. The logical next step would be the development of new methods with an express purpose to meta-analyse and synthesize these findings to take full advantage of their potential.

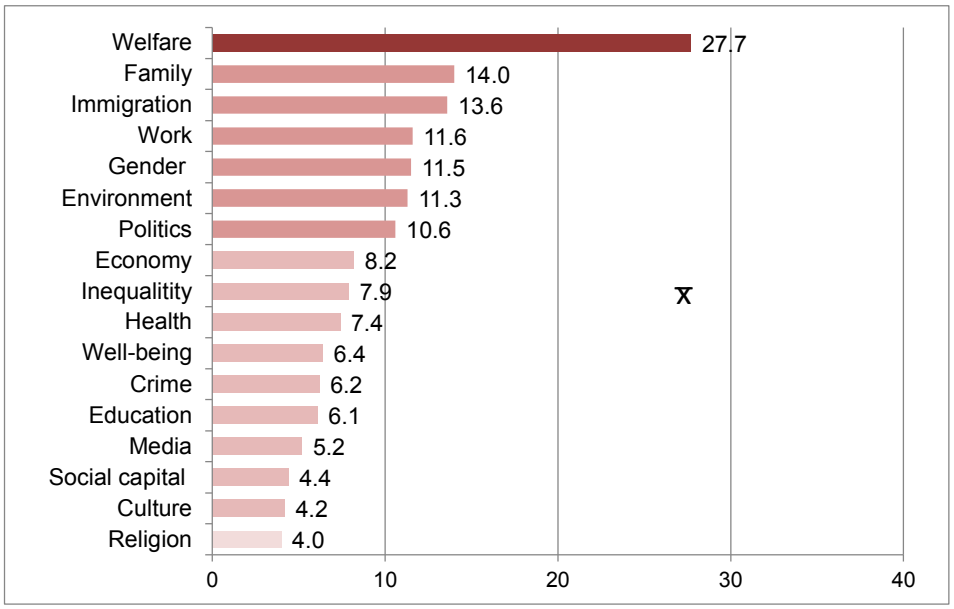

Figure 14: Average number of policy references across topics (N=2065 journal articles)

It should be noted though that while keywords search and policy type mapping in ESS publications can indicate in which areas ESS-based policy-informing is potentially strongest, specific paths of policy impact across ESS countries can only be traced using case study methodology (Kolarz, P. et al. 2017).

11 CONCLUDING REMARKS

As ESS approaches its **20th anniversary** and its time series is becoming conceptually and comparatively ever richer, it is likely to be one of the most anticipated data sources to **analyse the Covid-19** pandemic and its aftermath. It is already one of the leading European comparative data sources on a number of social issues such as immigration, political participation, work-life conflict, subjective wellbeing and others, all of which have been strongly affected by the pandemic. In terms of scientific impact, ESS can demonstrate its strong relevance both by the number of scientific publications and their theoretical content, as well as the spread of its academic usage across disciplines. ESS methodological rigour and fast growing cumulative samples offer so far unparalleled analytical opportunities for developing theories and informing policies.

ESS is also the leading source of methodological innovation in comparative survey research which will, hopefully, enable it to deliver the pandemic affected R10 fieldwork and cumulative dataset in the most comparative possible way in terms of pre-post analysis. Hopefully, this will include a largest set of countries, providing analysts ample with opportunities to observe key **country-level determinants**, such as national-level policies.

While the use of ESS data and the production of ESS based findings are strong, they are – also in relative terms – fairly uneven across countries. Particularly among recent and

sporadic members the room for improvement is considerable and it seems quite essential that ESS maintains and possibly extends existing user-friendly **teaching and online tools** which are used extensively at universities. Creating large user base among academia and students seems to be an important starting point to boost long-term use of the ESS data among all user groups.

Also in the light of its 20th anniversary, ESS could consider '**reviving' a selection of items** from earlier rounds, particularly parts of the Citizenship module that are hardly being used now due to ageing, but were highly popular among analysts for a number of years. Their currently minimal and largely historic user value would increase manifold if a fresh time point were added to the original measurement.

In the course of producing the 2020 report, a joint initiative is being implemented by NSD and UL to design an **integrated bibliographic solution** that would replace the former ESS Online Bibliography and merge its old records with the Google Scholar repository, with a search functionality added. This implies that for the first time bibliographic variables will become available to the wider audience, enabling users to browse ESS publications across to a variety of criteria such as authors' affiliations, topics, items or modules used, countries analysed etc. for either analytical or outreach reasons.

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