



Comparative Survey Design and Implementation 2014
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Survey Data Harmonization

The Issue of Data and Documentation Quality in Cross-National Surveys

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Our Project

“Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multi-Level Modeling in Cross-National Perspective.”

Substantive interest: relationship between protest behavior and political trust worldwide.



Data Limitations

Surveys are rarely integrated to allow for more comprehensive research designs.

- Gaps between well and poorly-sampled regions.
- Gaps within regions (East and West Europe).
- Lack of information on survey quality.

We argue that the answer is not more surveys, but better comparability and integration across existing surveys.

The master file now includes 1553 survey*country*waves in 140 countries/territories.



Survey Data Harmonization

Ex-post harmonization: combining separate datasets into a master file.

- Increased sample size.

- Better country coverage.

- Comparisons across regions.

Performing ex-post harmonization presents numerous challenges, and few such files exist.

- How much of the world is covered?

- How good is the data we have?



Criteria for Survey Selection

Surveys covering at least 2 countries.

Individual as unit of analysis.

Data in public domain.

Quality?



Data

Afrobarometer

Americas Barometer

Arab Barometer

Asia Europe Survey

Asian Barometer

Caucasus Barometer

Comparative National Elections
Project

Consolidation of Democracy in
Central and Eastern Europe

Eurobarometer

European Quality of Life Survey

European Social Survey

European Values Study + World
Values Survey

International Social Justice Project

International Social Survey

Programme

Latinobarometro

Life in Transition Surveys

New Baltic Barometer

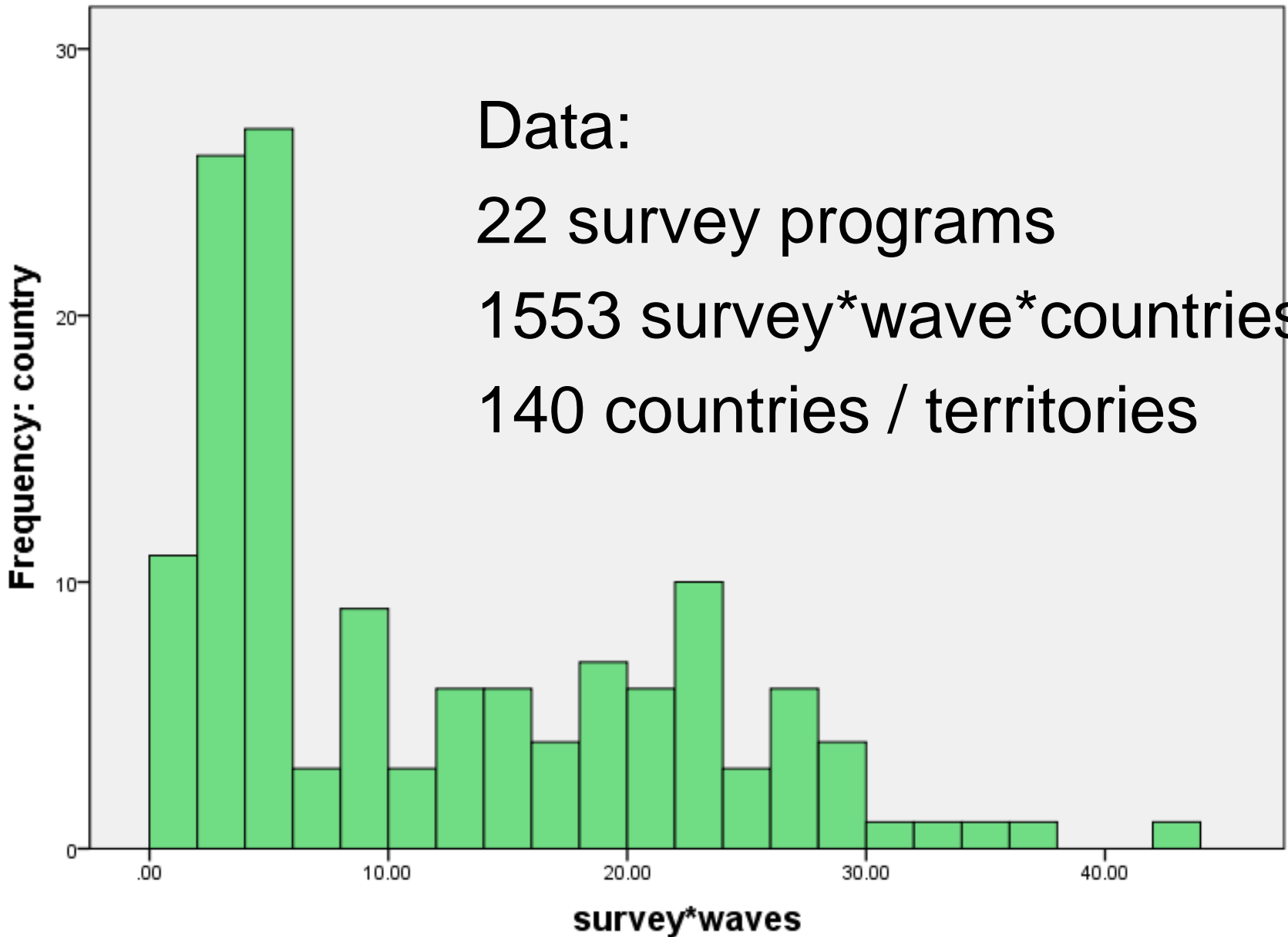
Political Action - An Eight Nation
Study

Political Action II

Political Participation and Equality
in Seven Nations

Values and Political Change in
Postcommunist Europe

Survey	Acronym	Years	#waves	#datasets
Afrobarometer	AFB	1999-2008	4	66
AmericasBarometer	AMB	2004-2012	5	92
Arab Barometer	ARB	2006-2011	2	16
Asia Europe Survey	ASES	2001	1	18
Asian Barometer	ASB	2001-2010	3	30
Caucasus Barometer	CB	2009-2012	4	12
Comparative National Elections Project	CNEP	2004-2006	1	8
Consolidation of Democracy in C and E Europe	CDCEE	1990-2001	2	27
Eurobarometer	EB	1983-2010	5	101
European Quality of Life Survey	EQLS	2003-2012	3	93
European Social Survey	ESS	2002-2012	6	147
European Values Study + World Values Survey	IVS	1981-2008	9	301
International Social Justice Project	ISJP	1991-1996	2	21
International Social Survey Programme	ISSP	1985-2009	10	256
Latinobarometro	LB	1995-2010	15	260
Life in Transition Surveys	LITS	2006-2010	2	64
New Baltic Barometer	NBB	1993-2004	6	18
Political Action - An Eight Nation Study	PA8NS	1973-1976	1	8
Political Action II	PA2	1979-1981	1	3
Political Participation and Equality in 7 Nations	PPE7N	1966-1971	1	6
Values and Political Change in Postcomm. Europe	VPCPE	1993-1994	1	5
		total	85	1553





Data Coverage

59 ctry*waves
N: 86,451

25 ctry*waves
N: 33,284

339 ctry*waves
N: 423,026

866 ctry*waves
N: 1178128

36 ctry*waves
N: 52,706

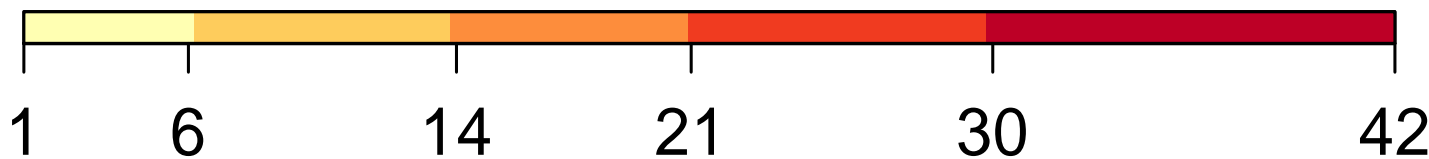
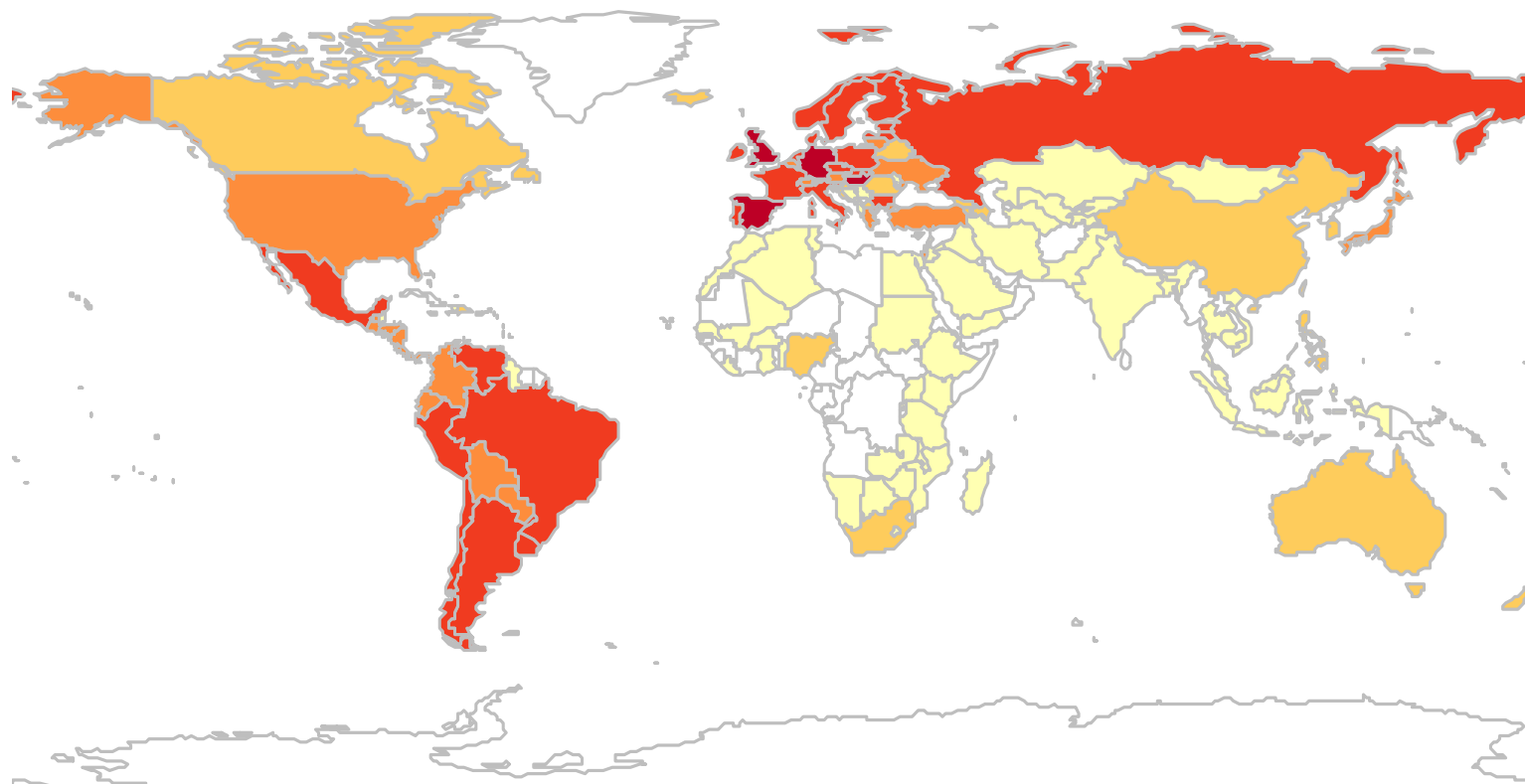
100 ctry*waves
N: 159,563

107 ctry*waves
N: 143,993

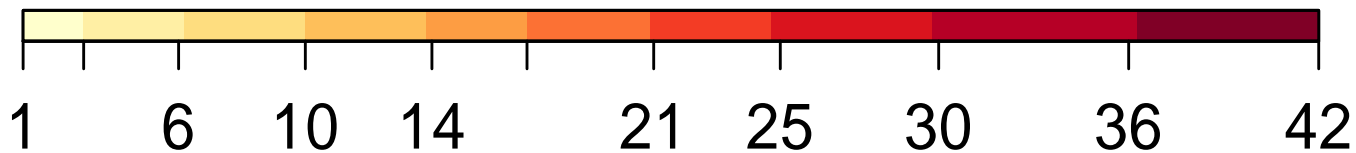
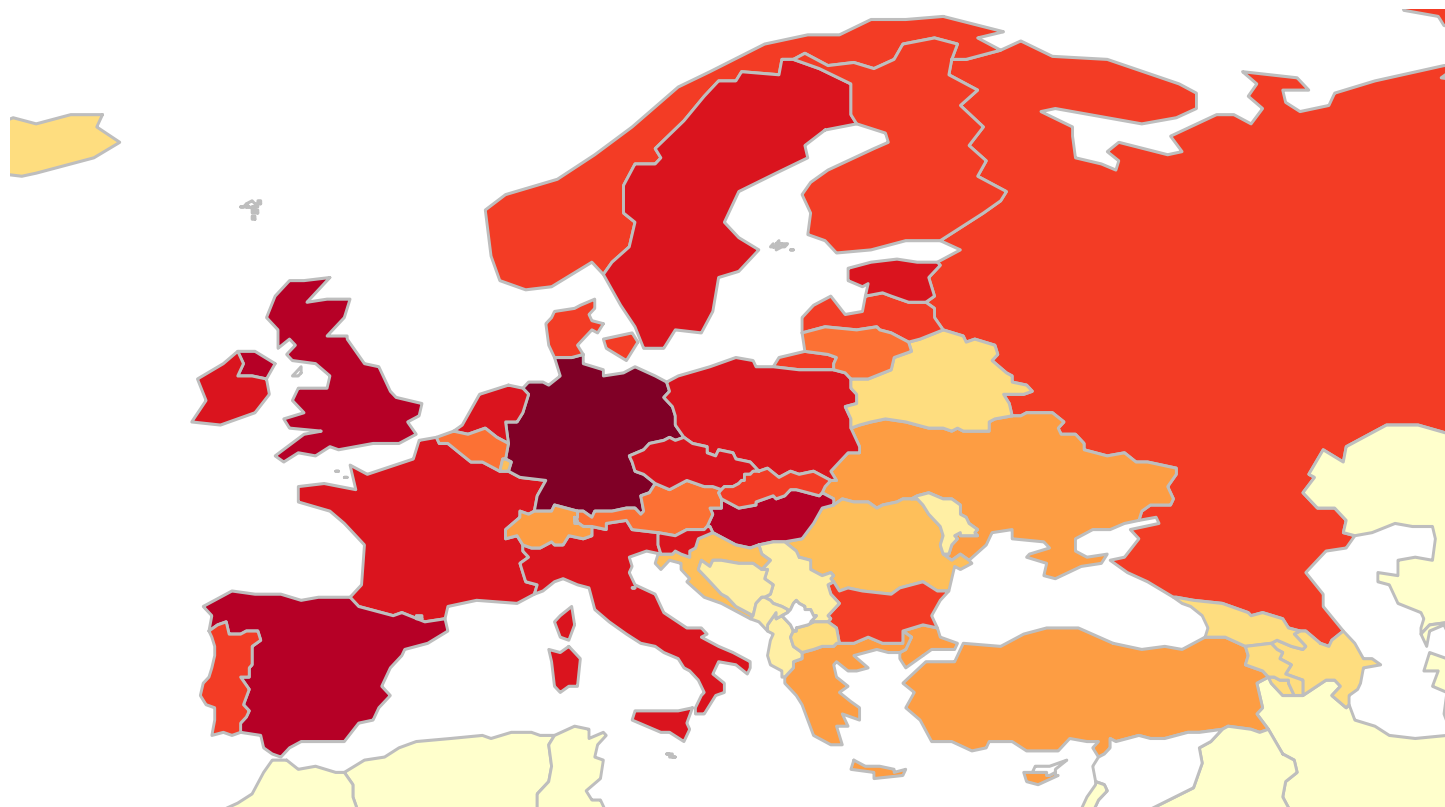
21 ctry*waves
N: 32,835

Total N: 2,109,986

Data Coverage



Data Coverage





Survey Data Quality

The world is fairly well surveyed – but, just how good is the data?

WAPOR offers rules for survey documentation, but these guidelines are rarely followed.

- Fully documented surveys are quite rare.
- Inconsistencies have been noted in the ISSP and WVS programs.



Evaluating Quality

Cornerstones of survey research according to de Leeuw, Hox and Dillman (*The International Handbook of Survey Methodology*, 2008).

Coverage.

Sampling.

Non-response.

Measurement.



Process approach

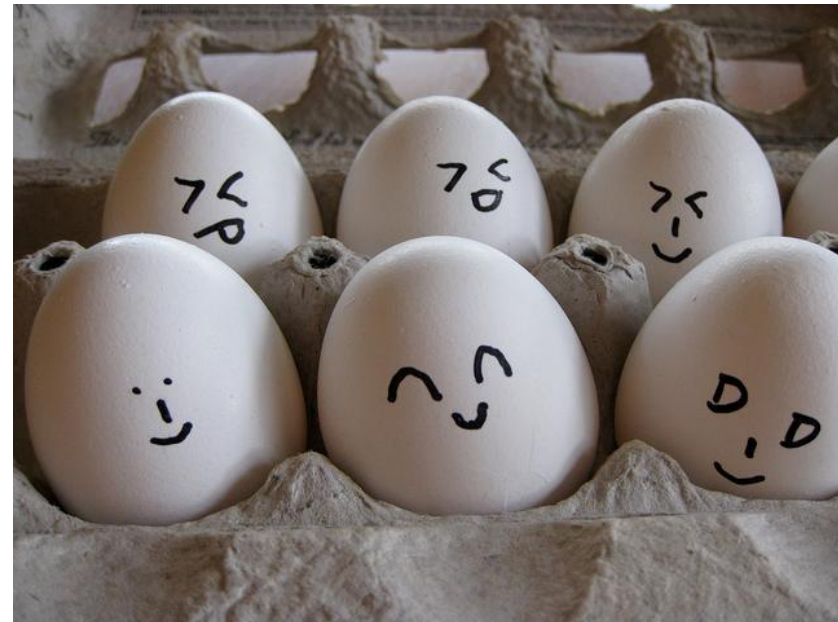
How do you buy your eggs?

Process approach:

cage-free, free-range,
organic, etc.

Product approach:

biochemical analysis of egg.





Documentation

We identify *documentation* as a basis for judging survey data quality. We assume the quality of survey data is reflected in the quality of documentation.

- Online text.
- Study descriptions.
- Methods reports.
- Technical reports.
- Codebooks.
- Random places.



Basic Quality Indicators

Response rate.

Questionnaire translation method (0 or 1).

Any documented method.

We do not penalize the survey's native language.

Pretest (0 or 1).

Fieldwork control (0 or 1).

-Interview supervised?

-Interview back checked?

Item non-response for question of interest.



Response Rate: Definitions (AAPOR)

Response Rate = full interviews / full & partial interviews + non-interviews (refusal + break-off + non-contacts + others) + all cases of unknown eligibility.

4 more definitions of response rates.

4 definitions of cooperation rates.

3 definitions of refusal rates.

3 definitions of contact rates.

Source: Standard Definitions report (7th edition, 2011), aapor.org.



Response Rate: Problems

“For non-probability samples, response rate calculations make little sense, given the broader inferential concerns. Further, for many of these surveys, the denominator is unknown, making the calculation of response rates impossible”

Source: Standard Definitions report (7th edition, 2011), p. 32, aapor.org



Asian Barometer 3, Indonesia

„Respond Rate: The original sample size is 1550. Successful interviews were 1226 without substitution, and therefore the respond rate is 79%. The number of substitution is 324, and there were no respondent unsuccessful interviews.”



Asian Barometer 3, Singapore

„Response Rate“

There were 1,000 successful interviews with 2427 households interviewed by interviewers, and therefore the response rate is 41.2%.„



ISSP 2010, Israel

„Interviews: 1023

These figures pertain to interviews in Jewish and Mixed (Jewish-Arab) communities. In the case of additional 193 interviews conducted in small Arab communities there was no sampling list and we have no information on response rates”



Response Rate: Data Gaps

1553 survey*wave*countries

908 s*w*c with response rate information (58.5%)

Example: Asian Barometer, 3rd wave.

9 countries, 9 country reports, 3 response rates.

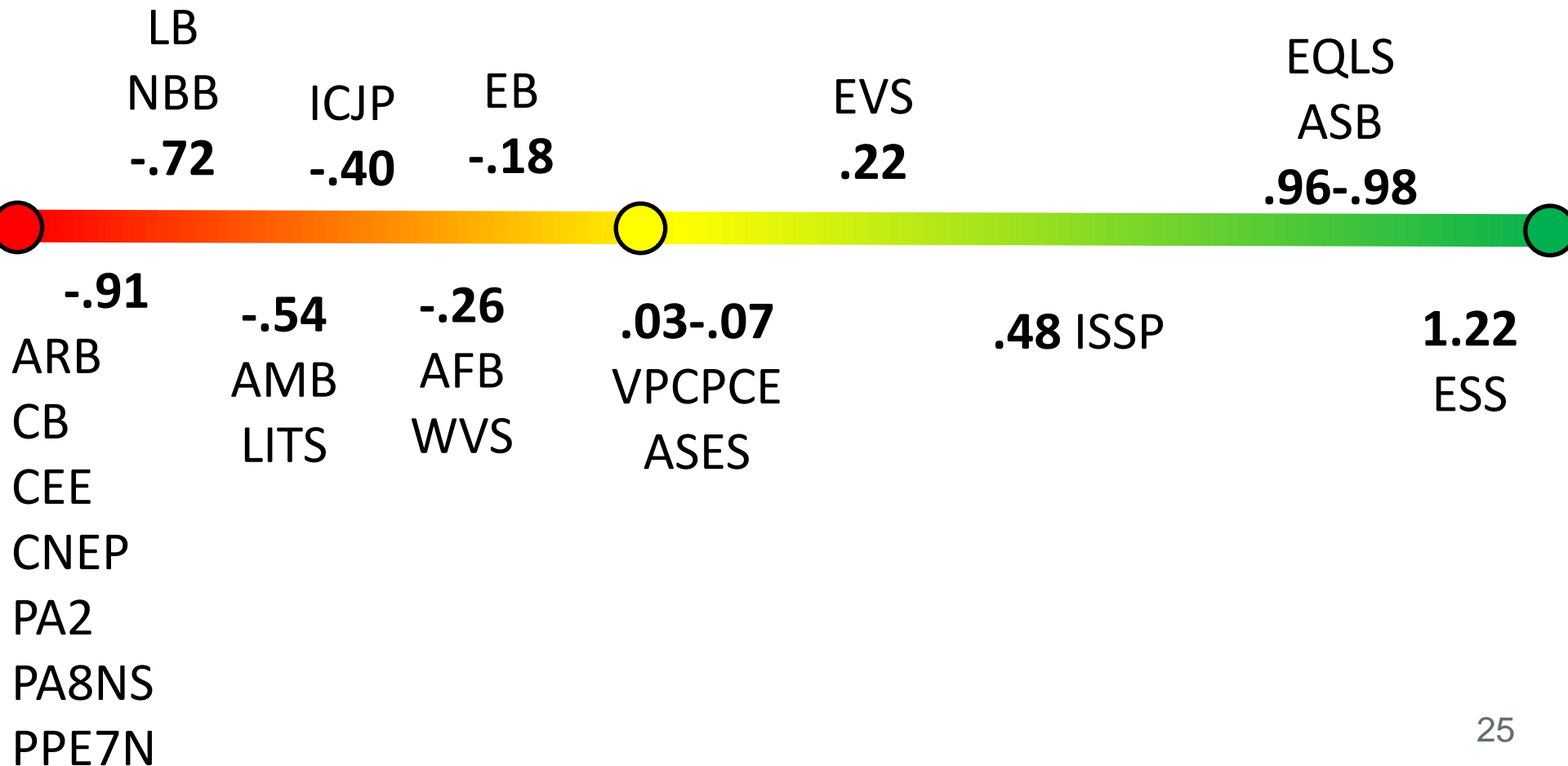
Survey	Total wave* countries	with response rates	with rr % total	average rr	SD rr
ESS	147	147	100%	.621	.100
EQLS	93	92	99%	.525	.186
ISSP	256	231	90%	.578	.190
PPE7N	6	5	83%	.816	.078
ISJP	21	17	81%	.721	.097
NBB	18	13	72%	.572	.157
AFB	66	42	64%	.803	.124
EVS	125	72	58%	.602	.176
WVS	176	85	48%	.685	.225
LITS	65	30	46%	.745	.114
ASB	30	12	40%	.704	.217
CB	12	3	25%	.750	.030
ARB	16	JOR 06	6%	.950	
No Response Rates: AMB, ASES, CEE, CNEP, EB, LB, PA2, PA8NS, VPCPCE					
			Average	.621	.185

Survey	Total wave* countries	translation (%)	pretest (%)	fieldwork control (%)	t+pt+fc
ESS	147	1.00	1.00	1.00	3.00
EQLS	93	1.00	0.99	0.70	2.69
ASB	30	0.97	0.50	0.97	2.43
ISSP	256	0.72	0.28	0.74	1.74
EVS	125	0.46	0.46	0.63	1.56
ASES	18	1.00	0.11	0.00	1.11
AmB	92	0.00	1.00	0.00	1.00
LITS	65	0.00	1.00	0.00	1.00
VPCPCE	5	1.00	0.00	0.00	1.00
WVS	176	0.13	0.31	0.49	0.94
AFB	66	0.30	0.30	0.30	0.91
EB	101	0.78	0.00	0.00	0.78
ISJP	21	0.29	0.14	0.24	0.67
NBB	18	0.00	0.00	0.22	0.22
LB	260	0.00	0.00	0.22	0.22
None of the 3 types of information: ARB, CB, CEE, CNEP, PA2, PA8NS, PPE7N					



Quality Index

(incl. translation, pretest & fieldwork control)





Item Non-response

Around 30 different labels:

Not sure - Can't choose - Don't know

Do not understand the question - Haven't thought much about it

Decline to answer

Break off

Interviewer error

Not asked in survey - Not applicable - Legal skip

No answer - Missing - Missing; Unknown

22 different values:

-9, -7, -5, -4, -3, -2, -1, 0, 3, 5, 6, 7, 8, 9,

77, 88, 98, 99, 998, 888888, 988888, 999999



Example: Trust in Parliament

Survey	% non-response	Survey	% non-response
ESS	3.17%	LITS	6.11%
EQLS	3.41%	EB	6.33%
EVS	4.16%	CNEP	6.46%
LB	4.55%	ASB	6.75%
AMB	4.63%	NBB	7.09%
WVS	4.99%	AFB	7.60%
VPCPCE	5.19%	ASES	8.48%
ISSP	5.21%	CB	8.49%
ARB	5.71%	CDCEE	10.54%
2-6 non-response categories		Total	5.04%



Quality Measures

Are these good measures of survey quality?

Other ways to quality?

Sample description.

Sampling method.

Coverage.

Nonresponse bias.

Weights.

Discrepancies between data and documentation.

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Acknowledgements



“Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multi-Level Modeling in Cross-National Perspective.”

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