

What Explains Country-Level Differences in Belief System Coherence?

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What are political belief systems?

IN THIS HOUSE, WE BELIEVE
BLACK LIVES MATTER
WOMEN'S RIGHTS
ARE HUMAN RIGHTS
NO HUMAN IS ILLEGAL
SCIENCE IS REAL
LOVE IS LOVE
KINDNESS
IS EVERYTHING

★ ★ ★ ★ ★ ★ ★ ★ ★ ★
IN THIS HOUSE
WE BELIEVE
HILLARY BELONGS
IN PRISON
JOE BELONGS
IN A NURSING HOME
★ ★ ★
TRUMP BELONGS
IN THE WHITE HOUSE
★ ★ ★ ★ ★ ★ ★ ★ ★ ★

What are political belief systems?

- Govern how different idea elements relate to, depend on, and interact with one another; influence political information processing and attitude formation
- Differ in providing functional interdependence (“constraint”) between distinct ideas and attitudes about politics
- Well-structured (“constrained”, or “coherent”) belief system features many, mutually reinforcing ties between different political idea elements
- Poorly structured belief systems have fewer, more loosely connected, disjoint elements

Theory and research question

- Past research investigates the properties of collective-level belief systems (e.g. Converse, 1969; Pop-Eleches & Tucker, 2017; Maxwell, 2019; Inglehart & Welzel, 2005; Baldassarri & Goldberg, 2014; Cornelis et.al., 2009; Boutyline & Vaisey 2017)
 - but no systematic comparison of belief system cohesion at the national level
- Comparative studies on citizens' ideological orientations imply cross-national variation in issue anchoring of symbolic ideology (e.g. Inglehart & Klingemann 1976; Fuchs & Klingemann 1990; Freire 2006; 2008)

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- **Do some national belief systems exhibit more constraint than others?**

Methodology: Belief networks coherence

- Core of eight political issue & identity items asked across all nine waves of the European Social Survey (ESS)

Table 3 (Online appendix). ESS survey items used for modeling national-level belief systems

Item	ESS code	Question wording
Symbolic Ideology	lrscale	In politics people sometimes talk of 'left' and 'right'. Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?
Income Differences	gincdif	[P]lease say to what extent you agree or disagree with each of the following statements. The government should take measures to reduce differences in income levels
LGTBQ Rights	freehms	Gay men and lesbians should be free to live their own life as they wish.
Immigration Attitudes	impctr	[Allow many/few immigrants from poorer countries outside Europe:] How about people from the poorer countries outside Europe?
Environmentalism	impenv	[Now I will briefly describe some people. Please listen to each description and tell me how much each person is or is not like you. Use this card for your answer.:] She/he strongly believes that people should care for nature. Looking after the environment is important to her/him.
Egalitarianism	ipeqopt	She/he thinks it is important that every person in the world should be treated equally. She/he believes everyone should have equal opportunities in life.
Obedience to Rules/Authority	ipfrule	She/he believes that people should do what they're told. She/he thinks people should follow rules at all times, even when no-one is watching.
Safety/Strong Government	ipstrgv	It is important to her/him that the government ensures her/his safety against all threats. She/he wants the state to be strong so it can defend its citizens.

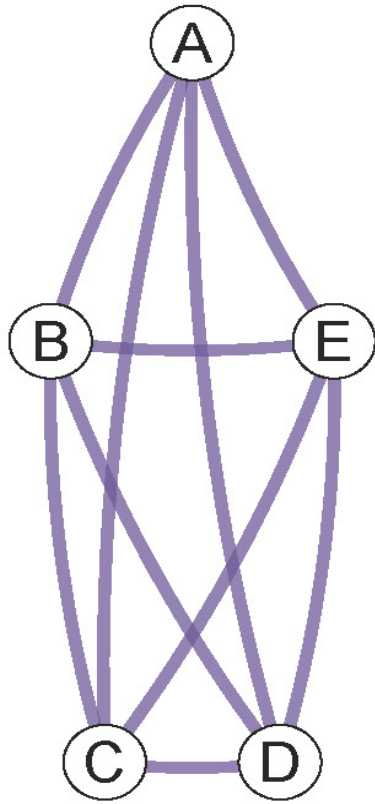
Methodology: Belief networks coherence

- Core of eight political issue & identity items asked across all nine waves of the European Social Survey (ESS)
- Panel of 38 countries covered between 2002 and 2020; n = 242 bi-annual country-level belief systems
- Network estimation using absolute polychoric correlation matrices for each country year

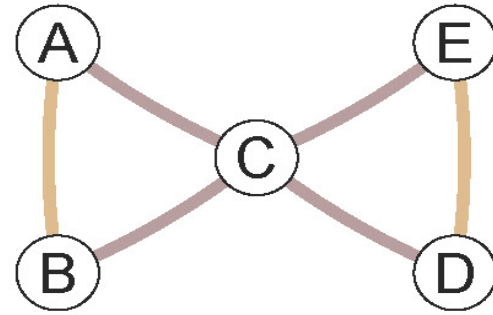
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- Key quantity of interest: Network correlational average path strength (ACPS)

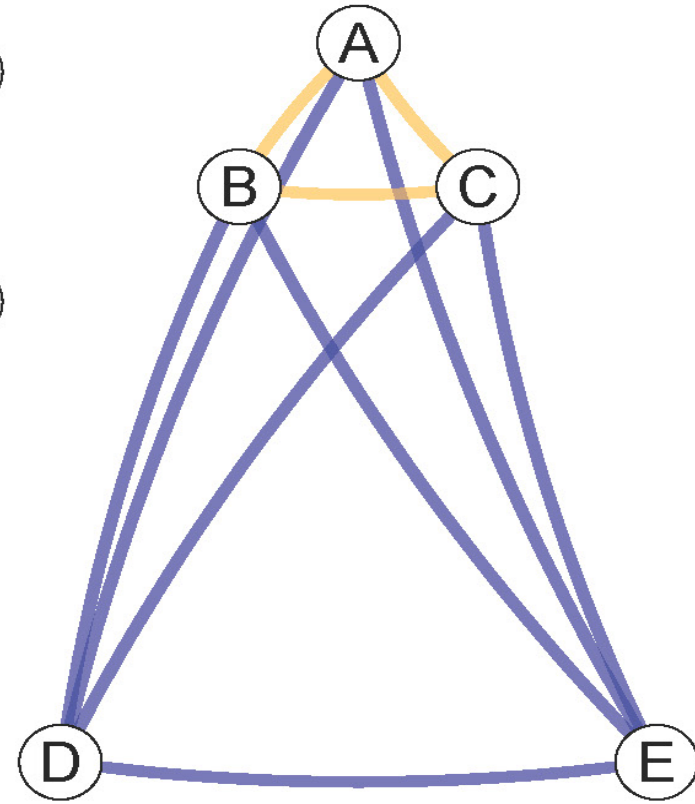
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BN 2

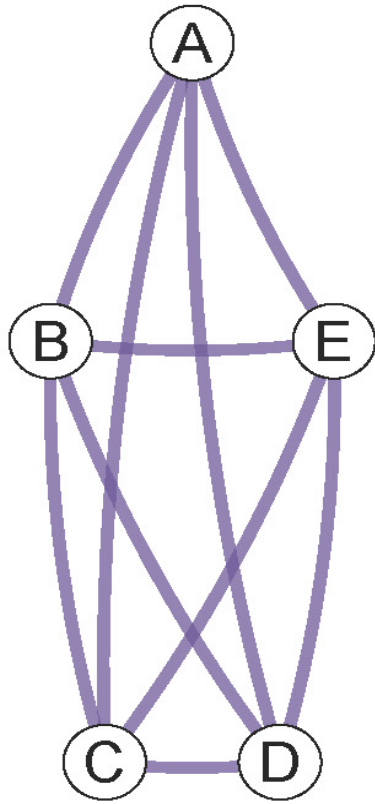


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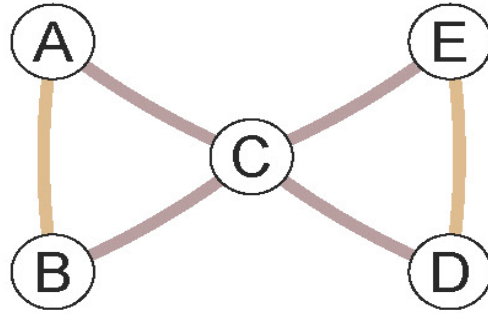


Bi-variate correlation strengths: 0.2 0.42 0.65 0.8 0.9

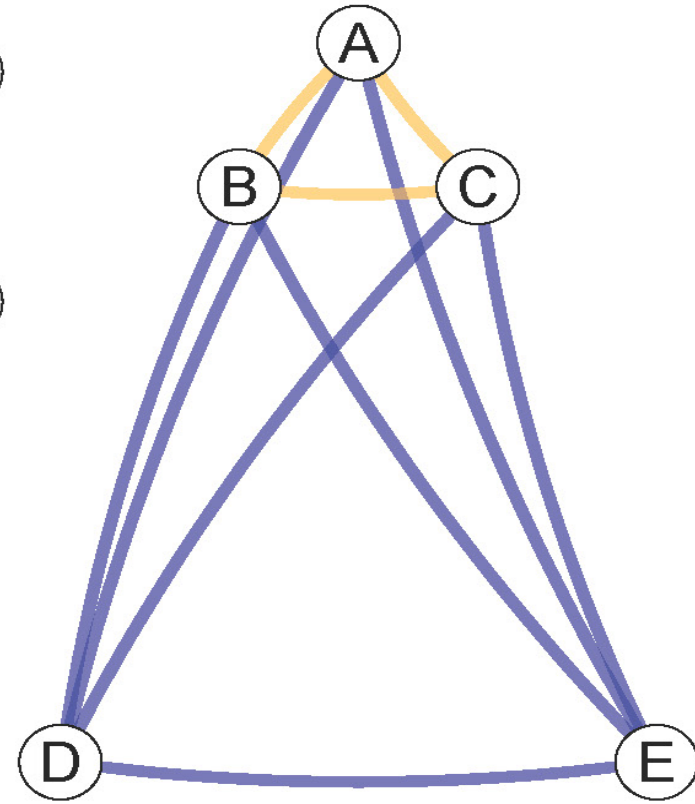
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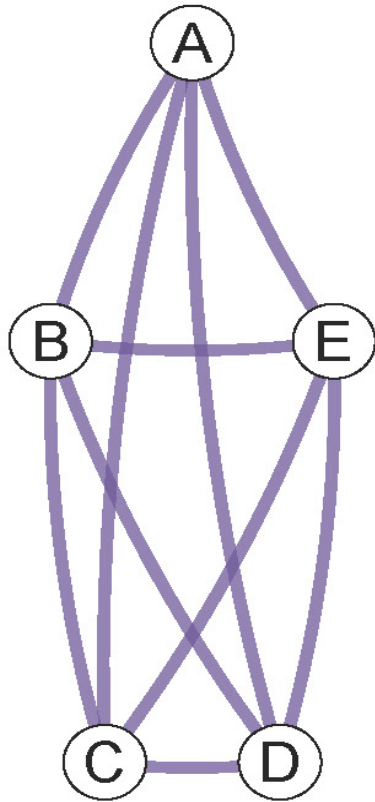
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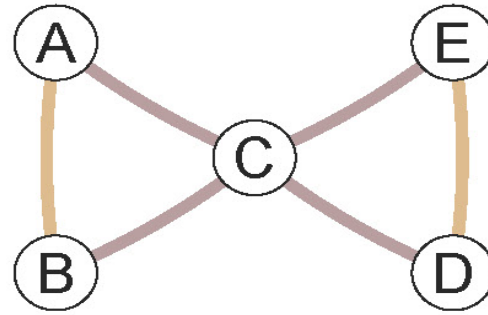
0.42

0.41

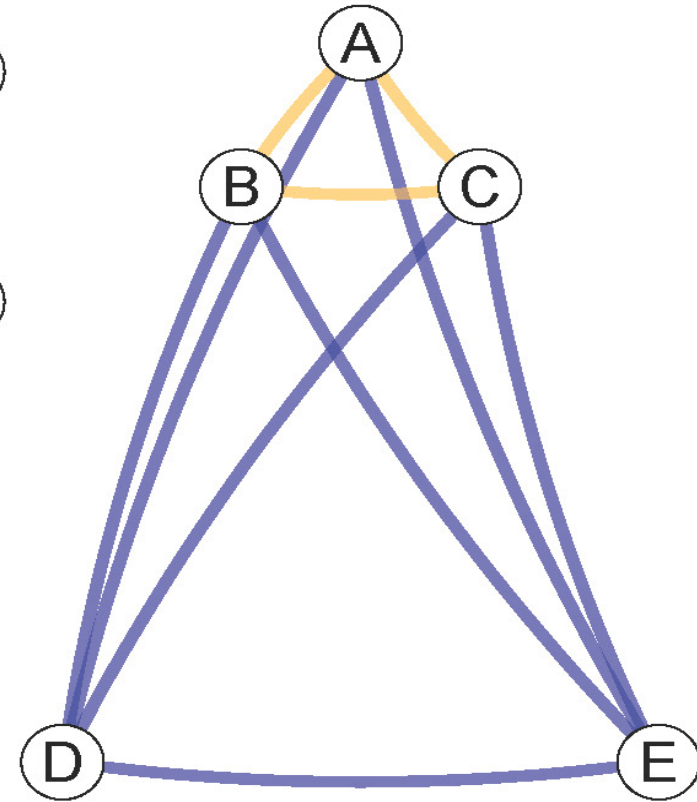
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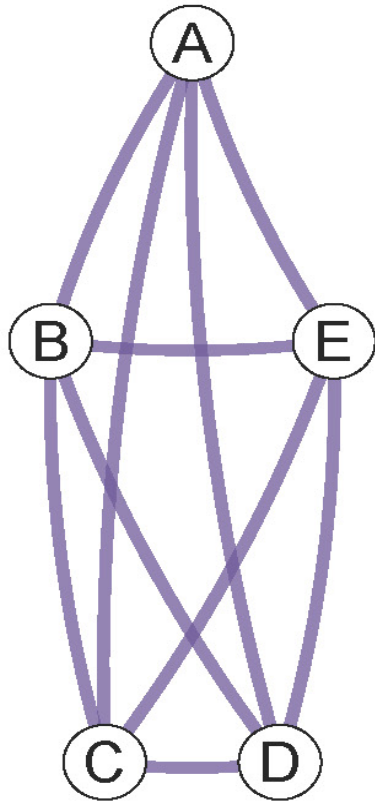
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Mean correl.: **0.42**
Size of leading EV: 2.68

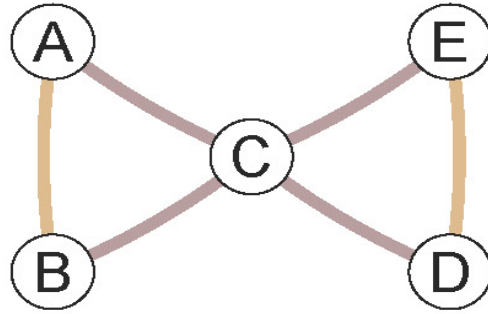
0.42
2.76

0.41
2.94

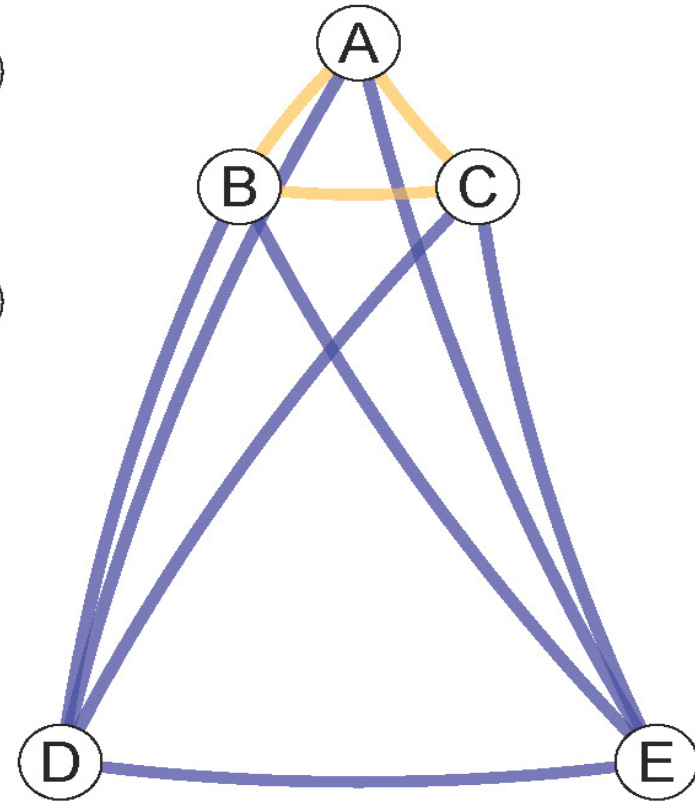
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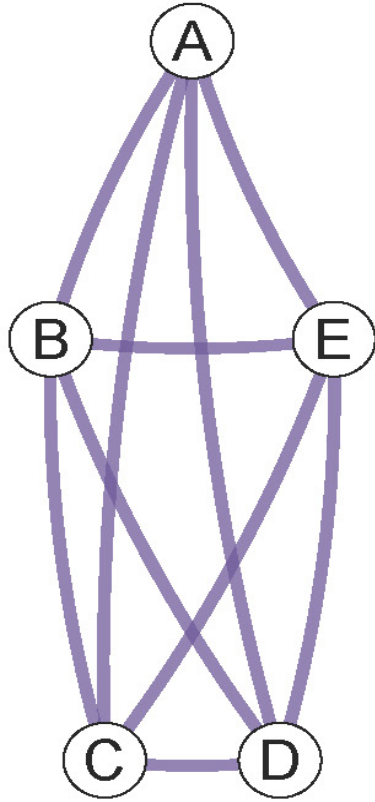
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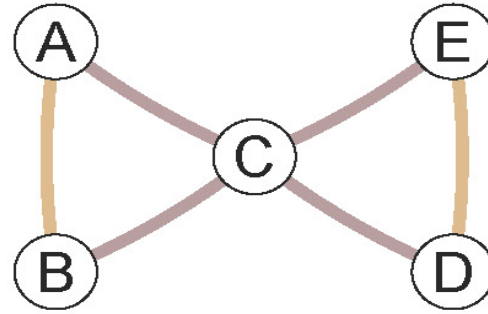
0.42
 2.76
 5.56

0.41
2.94
 5.36

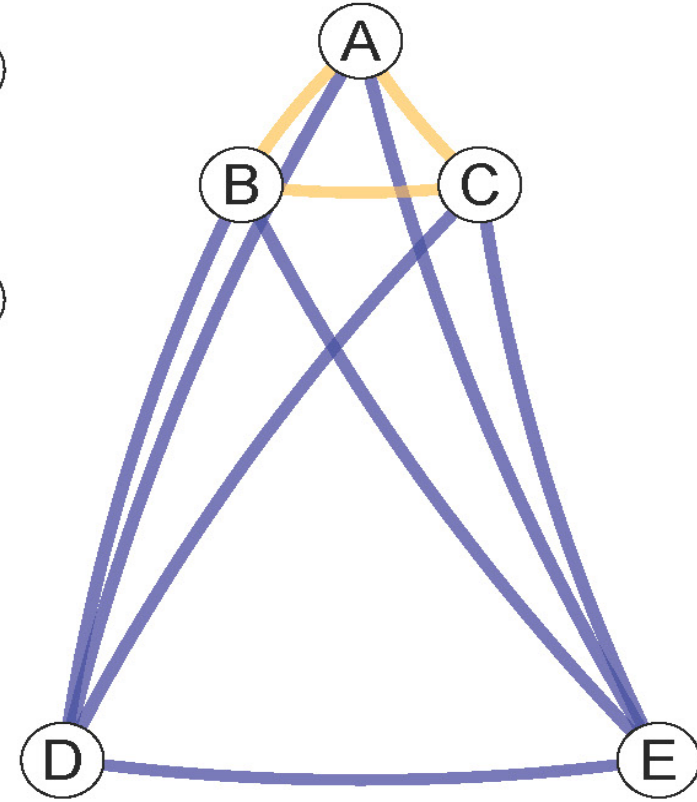
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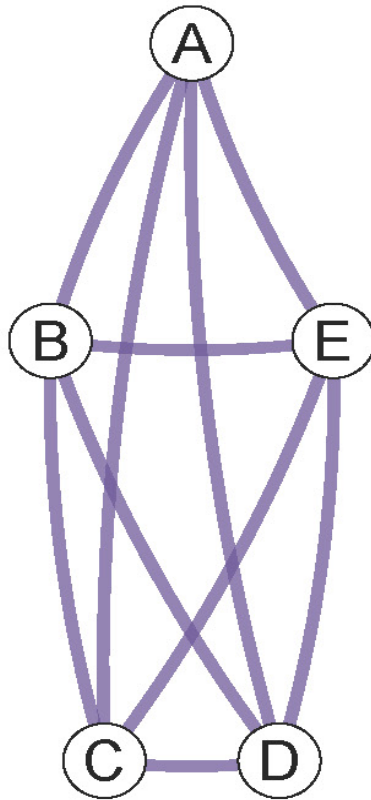
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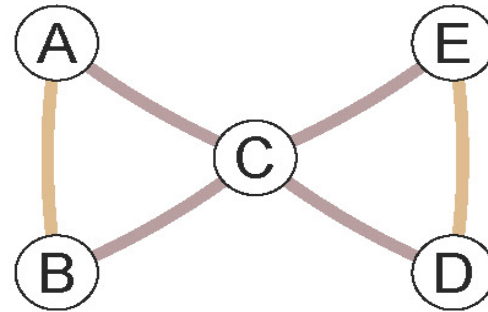
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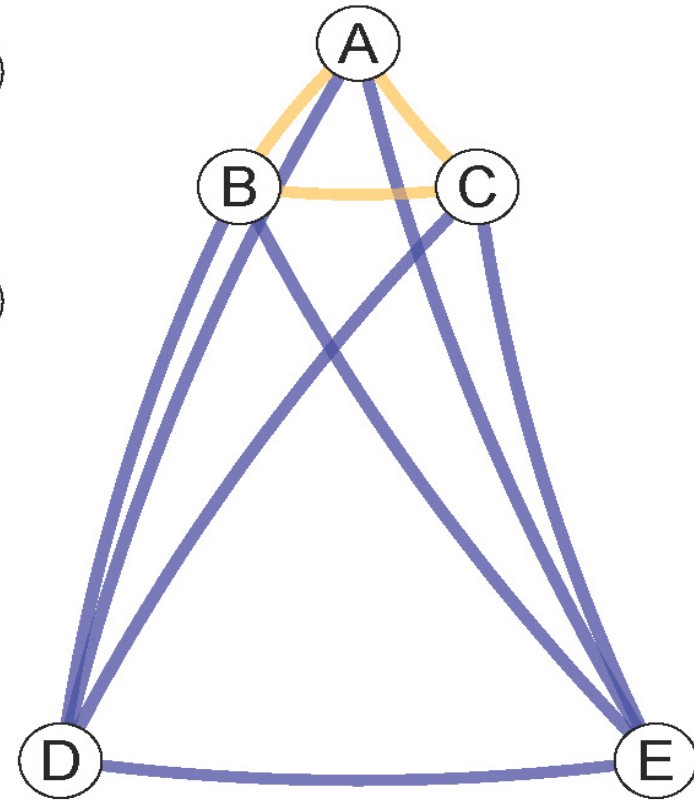
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Performance evaluation metrics

lower = more predictable

Mean squared error	0.6935	0.2089	0.9491
Bias squared	0.6911	0.2072	0.9443
Variance	0.0024	0.0016	0.0047

Methodology: Belief networks coherence

- Network correlational average path strength (ACPS)
 - Step 1: calculate the relative distance between any pair of nodes

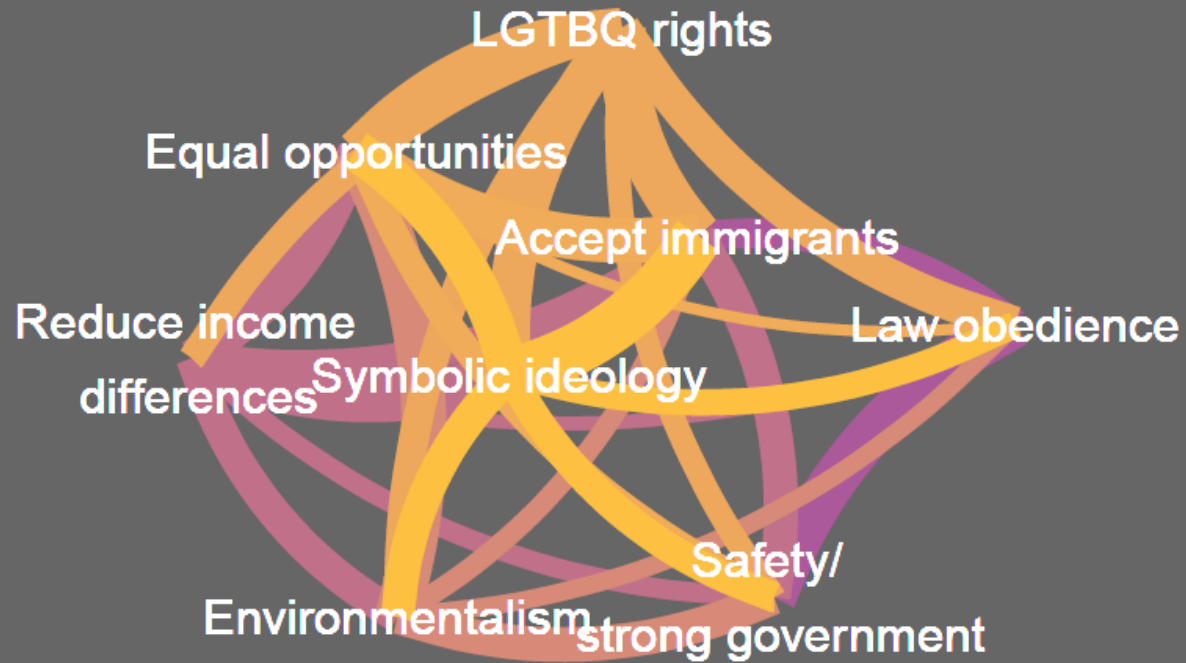
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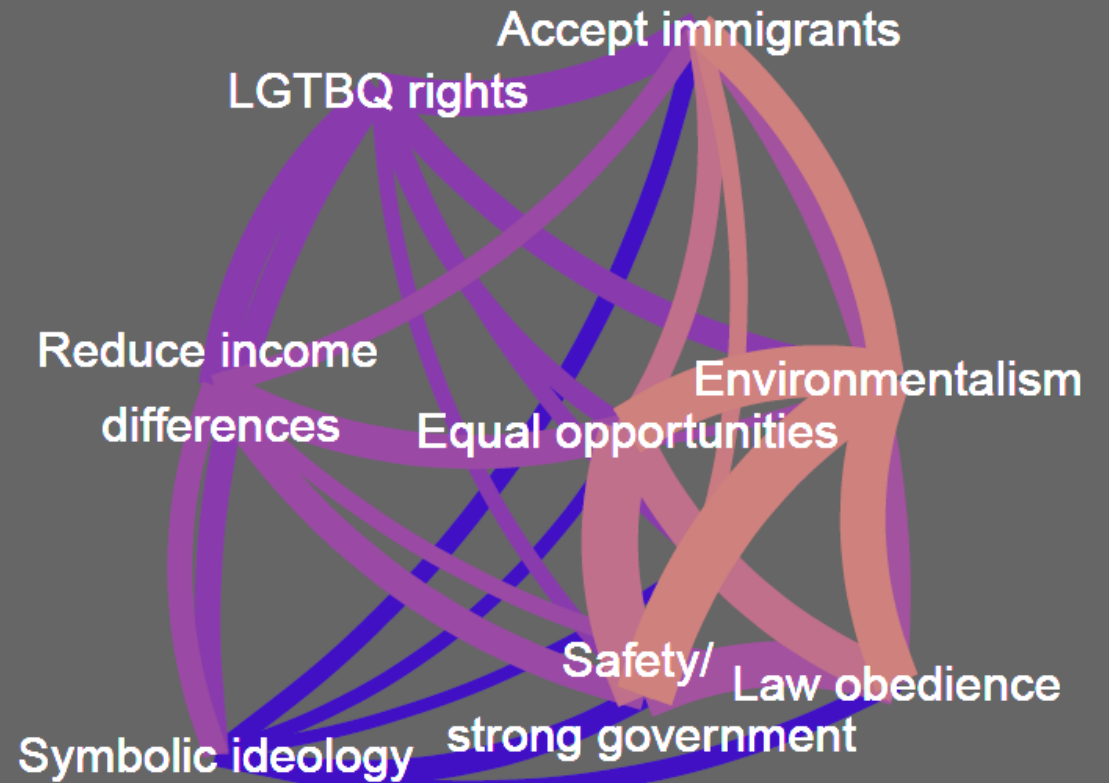
- Network correlational average path strength (ACPS)
 - Step 1: calculate the relative distance between any pair of nodes
 - Step 2: determine the shortest correlational path between any pair of nodes
 - Step 3: take the average among all shortest paths within network

Switzerland 2018



ACPS:0.107; Closeness centr. of left-right scale:0.03

Slovakia 2018



ACPS:0.08; Closeness centr. of left-right scale:0.012

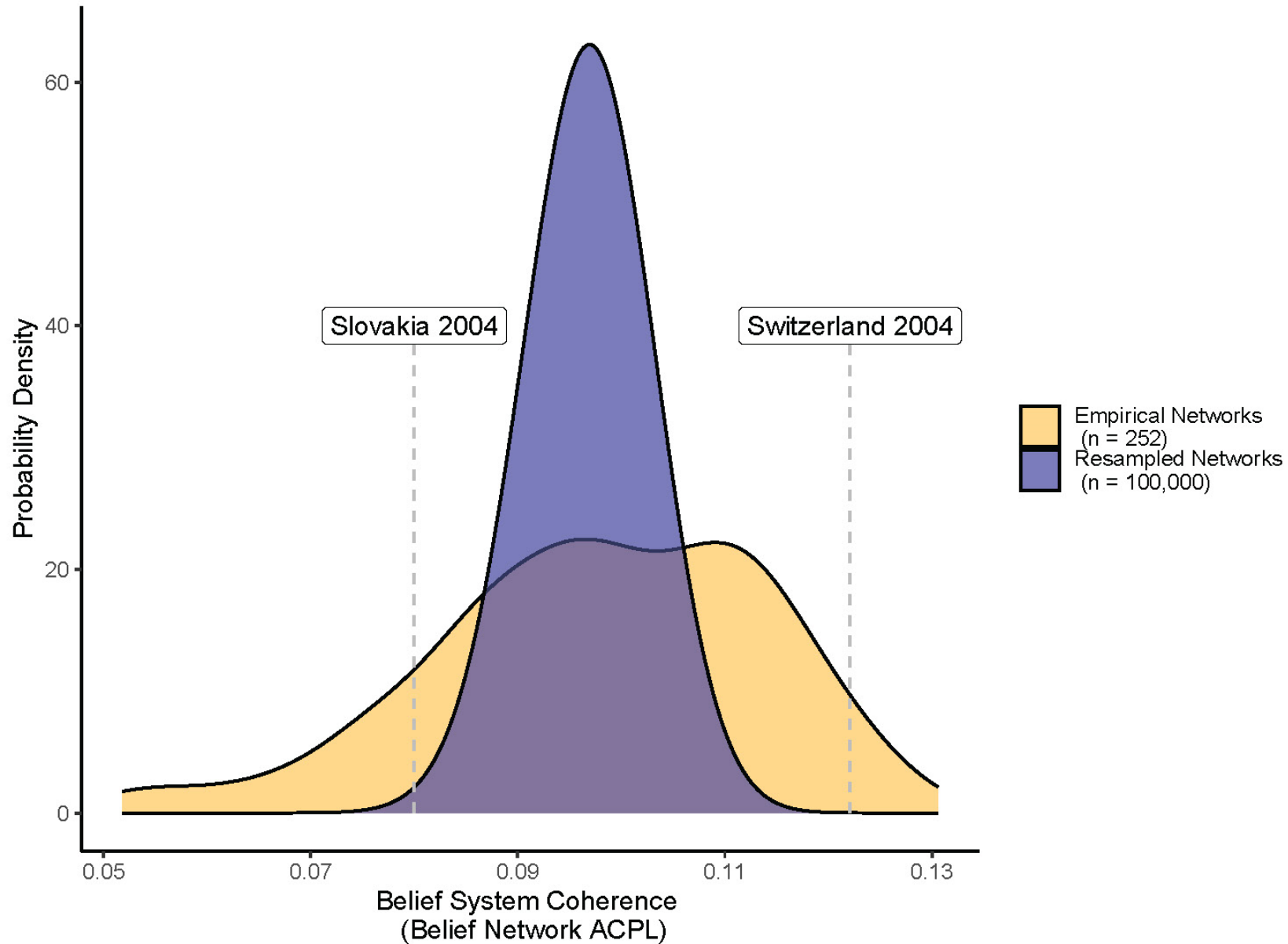
Belief Node Centrality (lowest to highest):



Descriptive inference: Key questions

1. How sizable are differences in average path-length across countries?
2. Are structural differences in country-level belief system coherence attributable to stable, country-level factors?

How meaningful are national-level differences in belief system coherence?



How systematic/how stable are these cross-national differences?

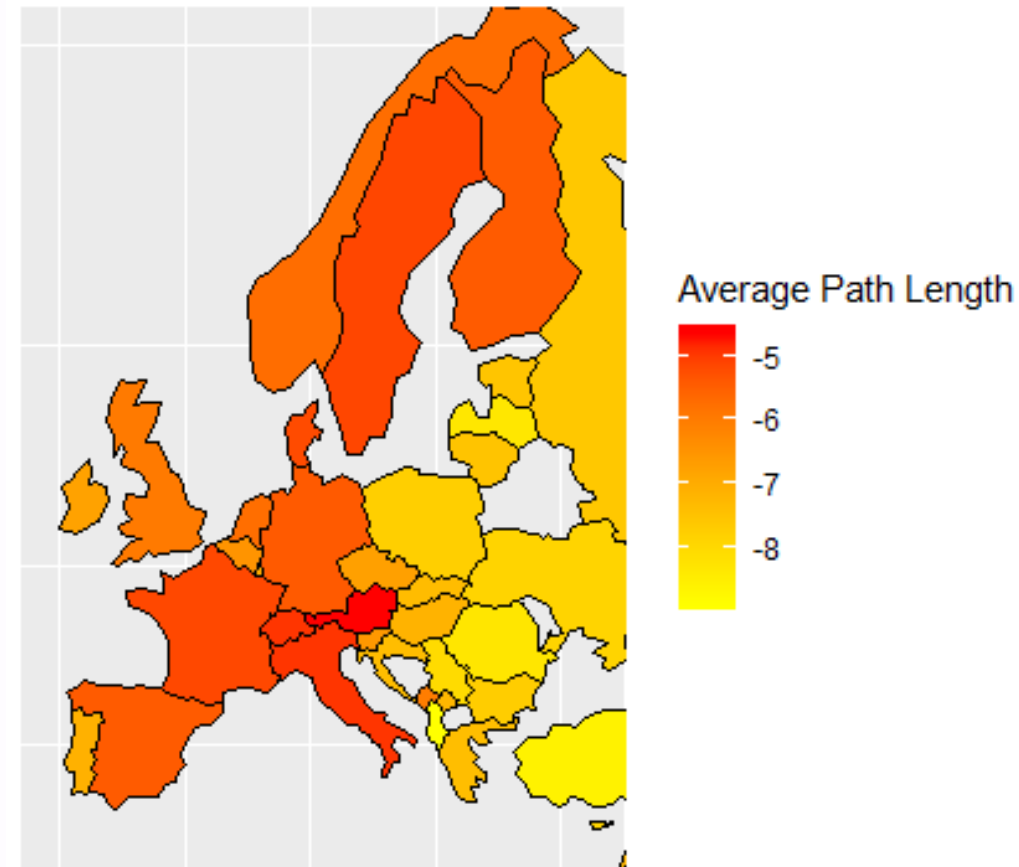
Table 2. Predicting belief system coherence: Country- and wave effects comparison

Sample	Observations	Model	R-Squared	Adj. R-Squared
All ESS countries (38)	252	Country Fixed-Effects	0.689	0.634
All ESS countries (38)	252	Wave Fixed-Effects	0.025	-0.011
All ESS countries (38)	252	Country & Wave F.E.	0.694	0.623
At least 9 waves (19)	164	Country Fixed Effects	0.671	0.635
At least 9 waves (19)	164	Wave Fixed Effects	0.02	-0.037
At least 9 waves (19)	164	Country & Wave-FE	0.686	0.629

Note: R-squared statistics from fixed effects regression models predicting country-level belief network ACPS statistics.

Descriptive inference

- Differences in country-level belief-system coherence are
 - Sizable (not likely due to random fluctuations)
 - Stable (attributable to country, not temporal-level)



Theoretical framework

Political parties: act as mediators between elite supply and mass demand for ideological attitude content

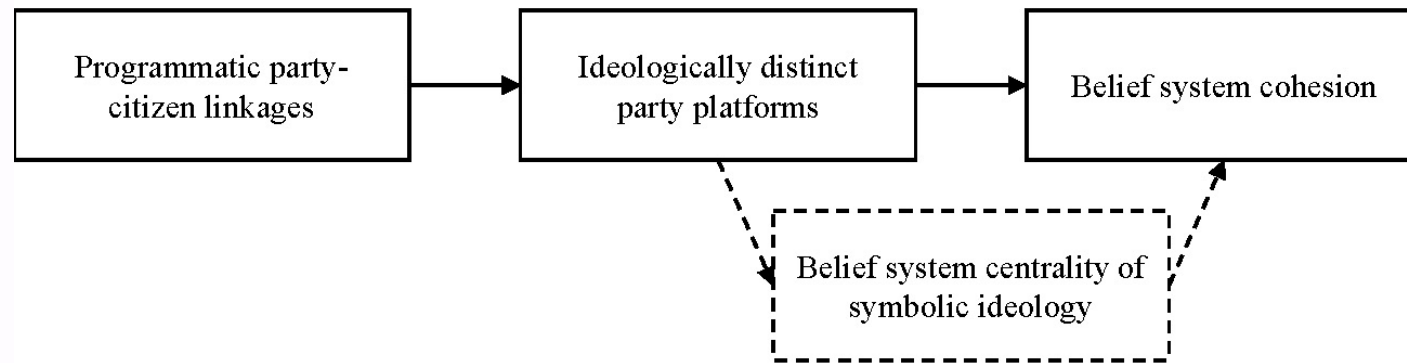


Table 3. Path regression model predicting national-level belief system constraint.

Main predictors	Std. Estimate
Programmatic linkages → Distinct party platforms	0.706*
Distinct party platforms → Belief system constraint	0.296*
Distinct party platforms → Centrality of symbolic ideology	0.454*
Centrality of symbolic ideology → Belief system constraint	0.275*
Mediated Effect	0.125*
Total Effect	0.421*
Share Mediated	0.297*
Control variables (directly predicting Belief system constraint)	
Education	0.022
Political interest	0.008
Issue polarization	0.014
Affective polarization	-0.072
Party-electoral fractionalization	0.028
Presidentialism index	-0.040
R-squared: Belief system constraint	0.379
Number of Observations	252

Note: Regression parameters marked with * achieve statistical significance at $p < 0.05$ or lower.

Conclusions

- Cross-national differences in belief-system coherence are sizable and attributable to relatively stable, national level particularities
- Countries which feature cohesive parties, programmatic party-citizen linkage exhibit higher degrees of belief system coherence
- Effect is mediated by relative belief system centrality of left-right ideology

Limitations

- Relatively small issue sample ($k=8$)
- No causal inference

Link to paper and slides:

