

# Family Origins of Affective Polarization

EPSA 2025 Annual Meeting

Stephan Dochow-Sondershaus, Frederik Hjorth, Kristian Karlson

June 26, 2025

# Roadmap

Motivation

Methods

Results

Conclusion

# Affective polarization



Source: <https://www.voterstudygroup.org/blog/has-american-partisanship-gone-too-far>

# Explaining individual variation

# Explaining individual variation

- elites dominate in existing literature

# Explaining individual variation

- elites dominate in existing literature
- **e.g., partisan elites** (Bäck et al., 2023; Banda and Cluverius, 2018; Gidron, Adams, and Horne, 2022),

# Explaining individual variation

- elites dominate in existing literature
- **e.g., partisan elites** (Bäck et al., 2023; Banda and Cluverius, 2018; Gidron, Adams, and Horne, 2022),

# Explaining individual variation

- elites dominate in existing literature
- e.g., partisan elites (Bäck et al., 2023; Banda and Cluverius, 2018; Gidron, Adams, and Horne, 2022), information environments (Lelkes, Sood, and Iyengar, 2017),



# Explaining individual variation

- elites dominate in existing literature
- e.g., partisan elites (Bäck et al., 2023; Banda and Cluverius, 2018; Gidron, Adams, and Horne, 2022), information environments (Lelkes, Sood, and Iyengar, 2017), or social media diets (Törnberg, 2022)

# Explaining individual variation

- elites dominate in existing literature
- e.g., partisan elites (Bäck et al., 2023; Banda and Cluverius, 2018; Gidron, Adams, and Horne, 2022), information environments (Lelkes, Sood, and Iyengar, 2017), or social media diets (Törnberg, 2022)
- alternatively, present-day behavior, e.g. social sorting (Mason, 2018)

## We shift attention to family background



Source: <https://herbiejpilato.medium.com/how-tvs-family-ties-turned-me-into-an-nbc-page-ff6d145c5666>

# Why is studying family background hard?

# Why is studying family background hard?

- traditional approach: sample adults + adolescent children (e.g., Jennings, Stoker, and Bowers, 2009), estimate parent-child correlations

# Why is studying family background hard?

- traditional approach: sample adults + adolescent children (e.g., Jennings, Stoker, and Bowers, 2009), estimate parent-child correlations
- but:

# Why is studying family background hard?

- traditional approach: sample adults + adolescent children (e.g., Jennings, Stoker, and Bowers, 2009), estimate parent-child correlations
- but:
  - family background may not have fully kicked in by adolescence

# Why is studying family background hard?

- traditional approach: sample adults + adolescent children (e.g., Jennings, Stoker, and Bowers, 2009), estimate parent-child correlations
- but:
  - family background may not have fully kicked in by adolescence
  - parent-child correlations only capture *parental* influence



# Why is studying family background hard?

- traditional approach: sample adults + adolescent children (e.g., Jennings, Stoker, and Bowers, 2009), estimate parent-child correlations
- but:
  - family background may not have fully kicked in by adolescence
  - parent-child correlations only capture *parental* influence
- our approach: capture full family background influence through **sibling correlations**

# Why is studying family background hard?

- traditional approach: sample adults + adolescent children (e.g., Jennings, Stoker, and Bowers, 2009), estimate parent-child correlations
- but:
  - family background may not have fully kicked in by adolescence
  - parent-child correlations only capture *parental* influence
- our approach: capture full family background influence through **sibling correlations**
- but difficult using random samples: w.  $N = 1,000$ ,  $\mathbb{E}[\text{N sibling pairs}] \approx 0.1$

# Why is studying family background hard?

- traditional approach: sample adults + adolescent children (e.g., Jennings, Stoker, and Bowers, 2009), estimate parent-child correlations
- but:
  - family background may not have fully kicked in by adolescence
  - parent-child correlations only capture *parental* influence
- our approach: capture full family background influence through **sibling correlations**
- but difficult using random samples: w.  $N = 1,000$ ,  $\mathbb{E}[\text{N sibling pairs}] \approx 0.1$
- we solve this problem using **registry data + sample size**

# Roadmap

Motivation

**Methods**

Results

Conclusion

# Sampling strategy

# Sampling strategy

Sampling frame from admin registry: 100.000 Danes

# Sampling strategy

Sampling frame from admin registry: 100.000 Danes

- G2: 40,000 parents born 1960 to 1965 and their siblings who have children

# Sampling strategy

Sampling frame from admin registry: 100.000 Danes

- G2: 40,000 parents born 1960 to 1965 and their siblings who have children
- G3: 60,000 'cousins'



# Sampling strategy

Sampling frame from admin registry: 100.000 Danes

- G2: 40,000 parents born 1960 to 1965 and their siblings who have children
- G3: 60,000 'cousins'
- $\implies$  survey responses from  $\sim 29,000$  respondents,  $\sim 500$  sibling groups

# Sampling strategy

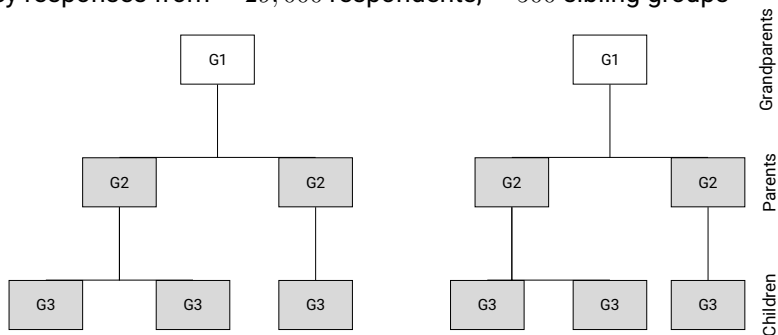
Sampling frame from admin registry: 100.000 Danes

- G2: 40,000 parents born 1960 to 1965 and their siblings who have children
- G3: 60,000 'cousins'
- $\implies$  survey responses from  $\sim 29,000$  respondents,  $\sim 500$  sibling groups

# Sampling strategy

Sampling frame from admin registry: 100.000 Danes

- G2: 40,000 parents born 1960 to 1965 and their siblings who have children
- G3: 60,000 'cousins'
- $\Rightarrow$  survey responses from  $\sim 29,000$  respondents,  $\sim 500$  sibling groups



# What sibling correlations tell us

Formally, *sibling correlations*:

# What sibling correlations tell us

Formally, *sibling correlations*:

$$\text{ICC} = \frac{\text{VAR}(u_j)}{\text{VAR}(u_j) + \text{VAR}(e_{ij})} = \frac{\text{VAR}(u_j)}{\text{VAR}(Y_{ij})},$$

# What sibling correlations tell us

Formally, *sibling correlations*:

$$\text{ICC} = \frac{\text{VAR}(u_j)}{\text{VAR}(u_j) + \text{VAR}(e_{ij})} = \frac{\text{VAR}(u_j)}{\text{VAR}(Y_{ij})},$$

- a comprehensive measure of family background (Grätz et al., 2021), including:

# What sibling correlations tell us

Formally, *sibling correlations*:

$$\text{ICC} = \frac{\text{VAR}(u_j)}{\text{VAR}(u_j) + \text{VAR}(e_{ij})} = \frac{\text{VAR}(u_j)}{\text{VAR}(Y_{ij})},$$

- a comprehensive measure of family background (Grätz et al., 2021), including:
  - genes, as tested wrt other outcomes in 2010s twin studies boom (Ojeda and Hatemi, 2015)

# What sibling correlations tell us

Formally, *sibling correlations*:

$$\text{ICC} = \frac{\text{VAR}(u_j)}{\text{VAR}(u_j) + \text{VAR}(e_{ij})} = \frac{\text{VAR}(u_j)}{\text{VAR}(Y_{ij})},$$

- a comprehensive measure of family background (Grätz et al., 2021), including:
  - i genes, as tested wrt other outcomes in 2010s twin studies boom (Ojeda and Hatemi, 2015)
  - ii 'shared family environment', i.e., parents, SES, etc.



# What sibling correlations tell us

Formally, *sibling correlations*:

$$\text{ICC} = \frac{\text{VAR}(u_j)}{\text{VAR}(u_j) + \text{VAR}(e_{ij})} = \frac{\text{VAR}(u_j)}{\text{VAR}(Y_{ij})},$$

- a comprehensive measure of family background (Grätz et al., 2021), including:
  - i genes, as tested wrt other outcomes in 2010s twin studies boom (Ojeda and Hatemi, 2015)
  - ii 'shared family environment', i.e., parents, SES, etc.
  - iii 'shared local environment', i.e., schools, friends, etc.

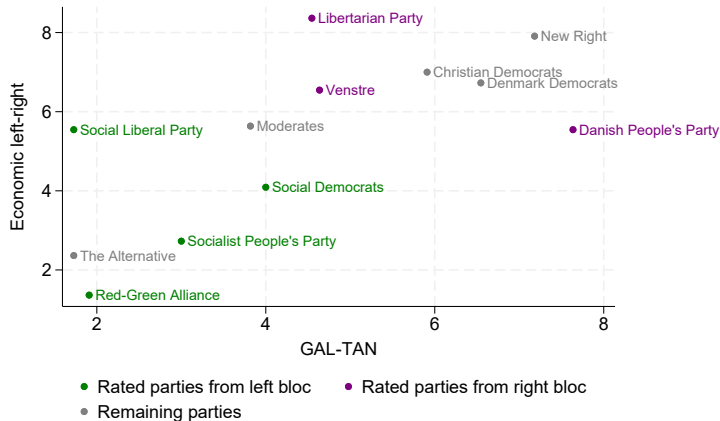
# What sibling correlations tell us

Formally, *sibling correlations*:

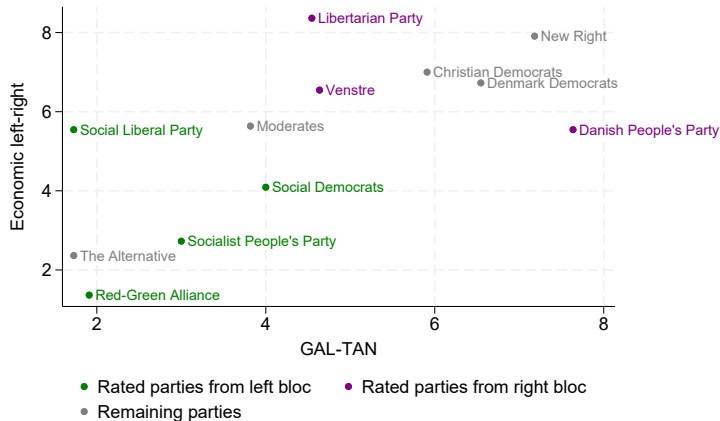
$$\text{ICC} = \frac{\text{VAR}(u_j)}{\text{VAR}(u_j) + \text{VAR}(e_{ij})} = \frac{\text{VAR}(u_j)}{\text{VAR}(Y_{ij})},$$

- a comprehensive measure of family background (Grätz et al., 2021), including:
  - i genes, as tested wrt other outcomes in 2010s twin studies boom (Ojeda and Hatemi, 2015)
  - ii 'shared family environment', i.e., parents, SES, etc.
  - iii 'shared local environment', i.e., schools, friends, etc.
- ↪ subsumes the parent-child correlation (Solon, 1999)

# To economize on length, rate subset of parties (Kasper, Schumacher, and Bakker, 2025)



# To economize on length, rate subset of parties (Kasper, Schumacher, and Bakker, 2025)



→ for each rated party, respondents rate affect toward party + voters

# Roadmap

Motivation

Methods

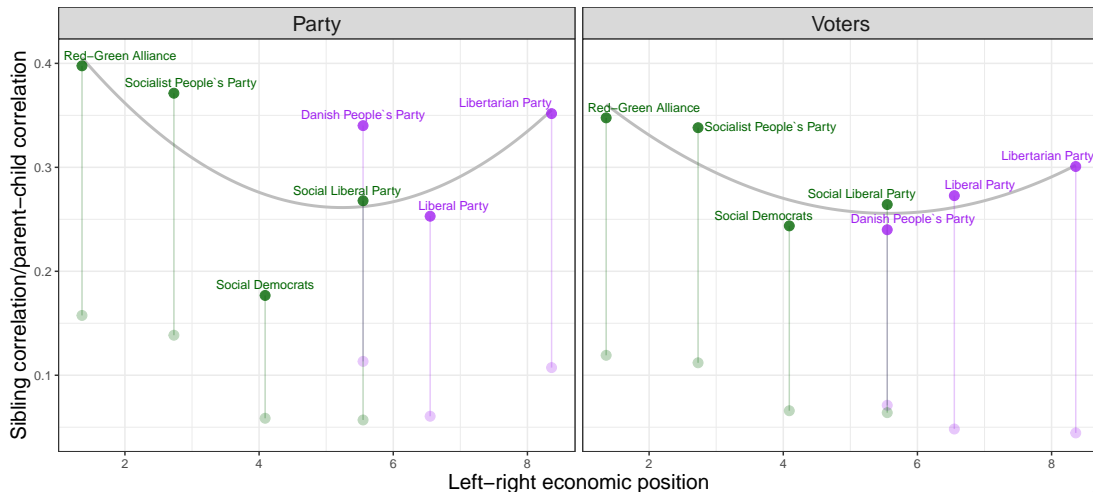
Results

Conclusion

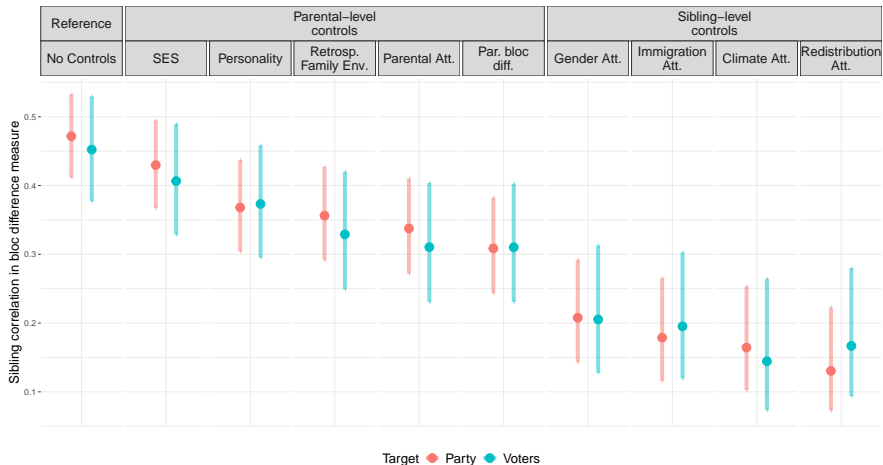
# Single parties: Results

Measure	Party ratings			Voter ratings		
	Sibling cor.	Parent-child cor.	N	Sibling cor.	Parent-child cor.	N
Spread	0.12 [0.07;0.2]	0.01	750	0.16 [0.09;0.25]	0.01	498
Range	0.1 [0.05;0.19]	0.01	750	0.17 [0.1;0.26]	0.01	498
Socialdemokratiet (S)	0.18 [0.12;0.25]	0.06	778	0.24 [0.17;0.33]	0.07	504
Venstre (V)	0.25 [0.2;0.32]	0.06	761	0.27 [0.2;0.36]	0.05	501
Enhedslisten (Ø)	0.4 [0.34;0.46]	0.16	710	0.35 [0.28;0.42]	0.12	492
Dansk Folkeparti (O)	0.34 [0.28;0.4]	0.11	775	0.24 [0.17;0.32]	0.07	515
Liberal Alliance (I)	0.35 [0.29;0.41]	0.11	709	0.3 [0.23;0.38]	0.04	484
SF - Socialistisk Folkeparti (F)	0.37 [0.31;0.43]	0.14	702	0.34 [0.27;0.42]	0.11	476
Radikale Venstre (B)	0.27 [0.21;0.34]	0.06	661	0.26 [0.19;0.35]	0.06	449
Red bloc avg.	0.35 [0.29;0.41]	0.13	750	0.33 [0.26;0.41]	0.11	498
Blue bloc avg.	0.38 [0.32;0.44]	0.12	750	0.33 [0.26;0.4]	0.07	498
Diff. blue-red bloc	0.47 [0.41;0.52]	0.22	750	0.45 [0.38;0.52]	0.20	498
In-outbloc	0.15 [0.09;0.23]	0.07	637	0.26 [0.18;0.35]	0.07	431

# Large role for family background, esp. for extreme parties

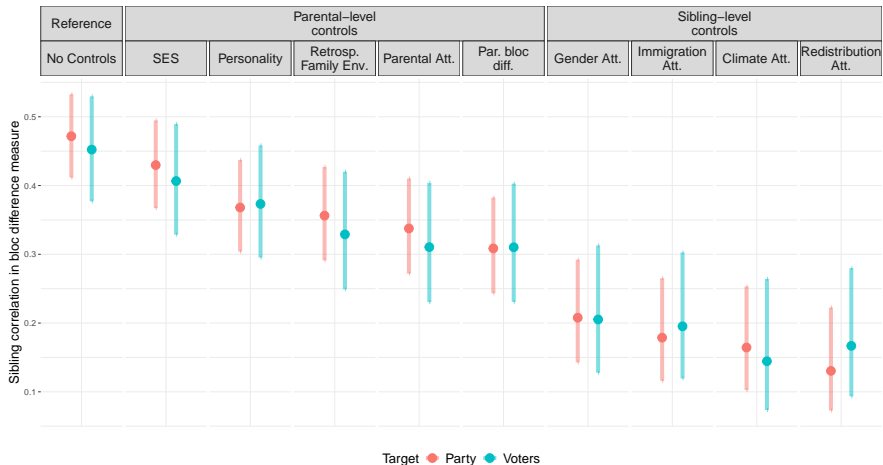


# What explains sibling correlations? Adding covariates





# What explains sibling correlations? Adding covariates



→ **sibling attitudes** contribute most to family background

# Roadmap

Motivation

Methods

Results

Conclusion

# Conclusion + Discussion

# Conclusion + Discussion

- shared family background explains roughly **30–40 pct.** of variation in outparty affect

## Conclusion + Discussion

- shared family background explains roughly **30–40 pct.** of variation in outparty affect
- $\implies$  parental transmission estimates severely underestimate role of family background

# Conclusion + Discussion

- shared family background explains roughly **30–40 pct.** of variation in outparty affect
- $\implies$  parental transmission estimates severely underestimate role of family background
- sibling agreement is strongest for more niche/extreme parties

## Conclusion + Discussion

- shared family background explains roughly **30–40 pct.** of variation in outparty affect
- $\implies$  parental transmission estimates severely underestimate role of family background
- sibling agreement is strongest for more niche/extreme parties
- caveats:

# Conclusion + Discussion

- shared family background explains roughly **30–40 pct.** of variation in outparty affect
- $\implies$  parental transmission estimates severely underestimate role of family background
- sibling agreement is strongest for more niche/extreme parties
- caveats:
  - $\rightarrow$  findings may not generalize to more polarized contexts




# Conclusion + Discussion

- shared family background explains roughly **30–40 pct.** of variation in outparty affect
- $\implies$  parental transmission estimates severely underestimate role of family background
- sibling agreement is strongest for more niche/extreme parties
- caveats:
  - findings may not generalize to more polarized contexts
  - sibling correlations also capture shared local environments (neighborhoods, friends), i.e., not narrowly 'family'

## Conclusion + Discussion

- shared family background explains roughly **30–40 pct.** of variation in outparty affect
- $\implies$  parental transmission estimates severely underestimate role of family background
- sibling agreement is strongest for more niche/extreme parties
- caveats:
  - findings may not generalize to more polarized contexts
  - sibling correlations also capture shared local environments (neighborhoods, friends), i.e., not narrowly 'family'
- $\implies$  much out-party animus is 'baked in' by early social structures, limits efficacy of depolarization interventions

Thanks for your attention!

Funded by  **erc**  
European Research Council  
Established by the European Commission

# References I

- Bäck, Hanna et al. (2023).** "Elite communication and affective polarization among voters". *Electoral Studies* 84, p. 102639.
- Banda, Kevin K and John Cluverius (2018).** "Elite polarization, party extremity, and affective polarization". *Electoral Studies* 56, pp. 90–101.
- Gidron, N., J. Adams, and W. Horne (2022).** "Who dislikes whom? Affective polarization between pairs of parties in western democracies". en. *Comparative Political Studies*.
- Grätz, Michael et al. (June 2021).** "Sibling Similarity in Education Across and Within Societies". en. *Demography* 58.3, pp. 1011–1037. ISSN: 0070-3370, 1533-7790. DOI: [10.1215/00703370-9164021](https://doi.org/10.1215/00703370-9164021).
- Jennings, M. Kent, Laura Stoker, and Jake Bowers (2009).** "Politics across Generations: Family Transmission Reexamined". *The Journal of Politics* 71.3, pp. 782–99.

# References II

- Kasper, Jakob, Gijs Schumacher, and Bert N. Bakker (Apr. 2025).** “Establishing the construct and predictive validity of brief measures of affective polarization”. en. *European Journal of Political Research*, pp. 1475–6765.70022. ISSN: 0304-4130, 1475-6765. DOI: [10.1111/1475-6765.70022](https://doi.org/10.1111/1475-6765.70022).
- Lelkes, Yphtach, Gaurav Sood, and Shanto Iyengar (Jan. 2017).** “The Hostile Audience: The Effect of Access to Broadband Internet on Partisan Affect”. en. *American Journal of Political Science* 61.1, pp. 5–20. ISSN: 0092-5853, 1540-5907. DOI: [10.1111/ajps.12237](https://doi.org/10.1111/ajps.12237).
- Mason, Lilliana (2018).** *Uncivil agreement: How politics became our identity*. University of Chicago Press.
- Ojeda, Christopher and Peter K. Hatemi (2015).** “Accounting for the Child in the Transmission of Party Identification”. *American Sociological Review* 80.6, pp. 1150–74.
- Solon, Gary (1999).** “Intergenerational mobility in the labor market”. *Handbook of Labor Economics*. Ed. by Orley Ashenfelter and David Card. Vol. 3. Elsevier, pp. 1761–1800.

# References III

**Törnberg, Petter (2022).** “How digital media drive affective polarization through partisan sorting”. *Proceedings of the National Academy of Sciences* 119.42, e2207159119.

## Appendix 1

Target	Measure	N	Only issue positions	Only personality
Party	Diff. blue-red bloc	670	0.33 [0.27;0.4]	0.38 [0.32;0.44]
	Enhedslisten (Ø)	674	0.25 [0.19;0.32]	0.29 [0.23;0.36]
	SF - Socialistisk Folkeparti (F)	638	0.29 [0.22;0.36]	0.31 [0.25;0.38]
	Socialdemokratiet (S)	726	0.18 [0.12;0.25]	0.16 [0.1;0.23]
	Radikale Venstre (B)	610	0.23 [0.17;0.31]	0.23 [0.17;0.31]
	Venstre (V)	715	0.18 [0.12;0.26]	0.2 [0.14;0.27]
	Liberal Alliance (I)	664	0.27 [0.21;0.34]	0.29 [0.22;0.35]
	Dansk Folkeparti (O)	715	0.25 [0.19;0.32]	0.29 [0.23;0.35]
Voters	Diff. blue-red bloc	376	0.3 [0.22;0.4]	0.37 [0.29;0.46]
	Enhedslisten (Ø)	379	0.18 [0.11;0.29]	0.23 [0.16;0.33]