



# Cleavages of trust in a high trusting country

Level of trust and attitudes towards climate change in Finland

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# Contents of the presentation

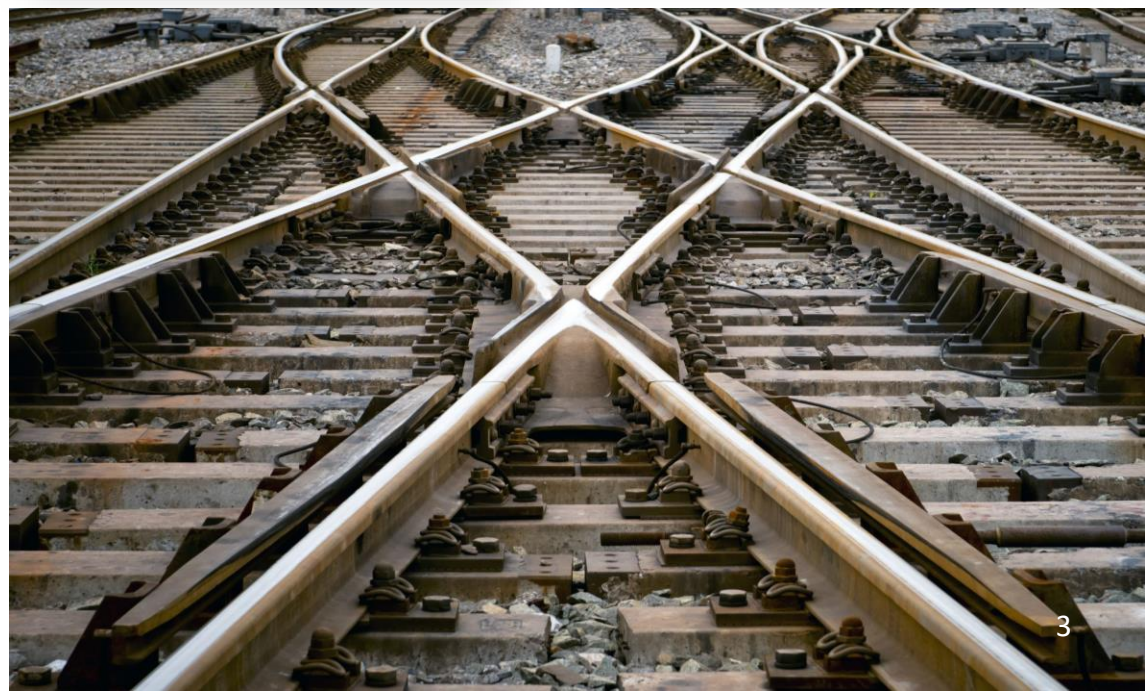
- Context: Finland - a Nordic welfare state
- Key concepts: climate concern, trust
- Elements of trust and climate attitudes
- Impact of sociodemographic factors and political party preference on attitudes
- Aim, material and methods
- Results
- Discussion: an emerging phenomenon in a new context





# Background, social and political context

- Nordic welfare states assumed to have the most potential in mitigation of climate change (Gough 2015)
  - Comprehensive governance
  - Stable political system
  - Well-educated and informed population
  - (High carbon footprint per capita)
- Finland – a high trusting country
  - “Happiest” country in the world, e.g., resilient when facing crises (World Happiness Report 2023)
  - On a high level in practically all dimensions of trust (esp. trust in the political system, in civil service, in the police, generalized trust) (OECD 2020)





# Key concepts: Climate concern and trust

- Climate concern is driven by perceptions of climate change's causes and consequences
  - comprises of different levels, such as general change concern, climate change's personal impact, and societal impact
- Climate concern is a significant factor in explaining public support for climate policy
- According to earlier research, e.g., female gender, younger age and education predict higher climate concern
- Trust: “If you trust in someone or something, you believe strongly in them, and do not doubt their powers or their good intentions” (Collins Dict.)



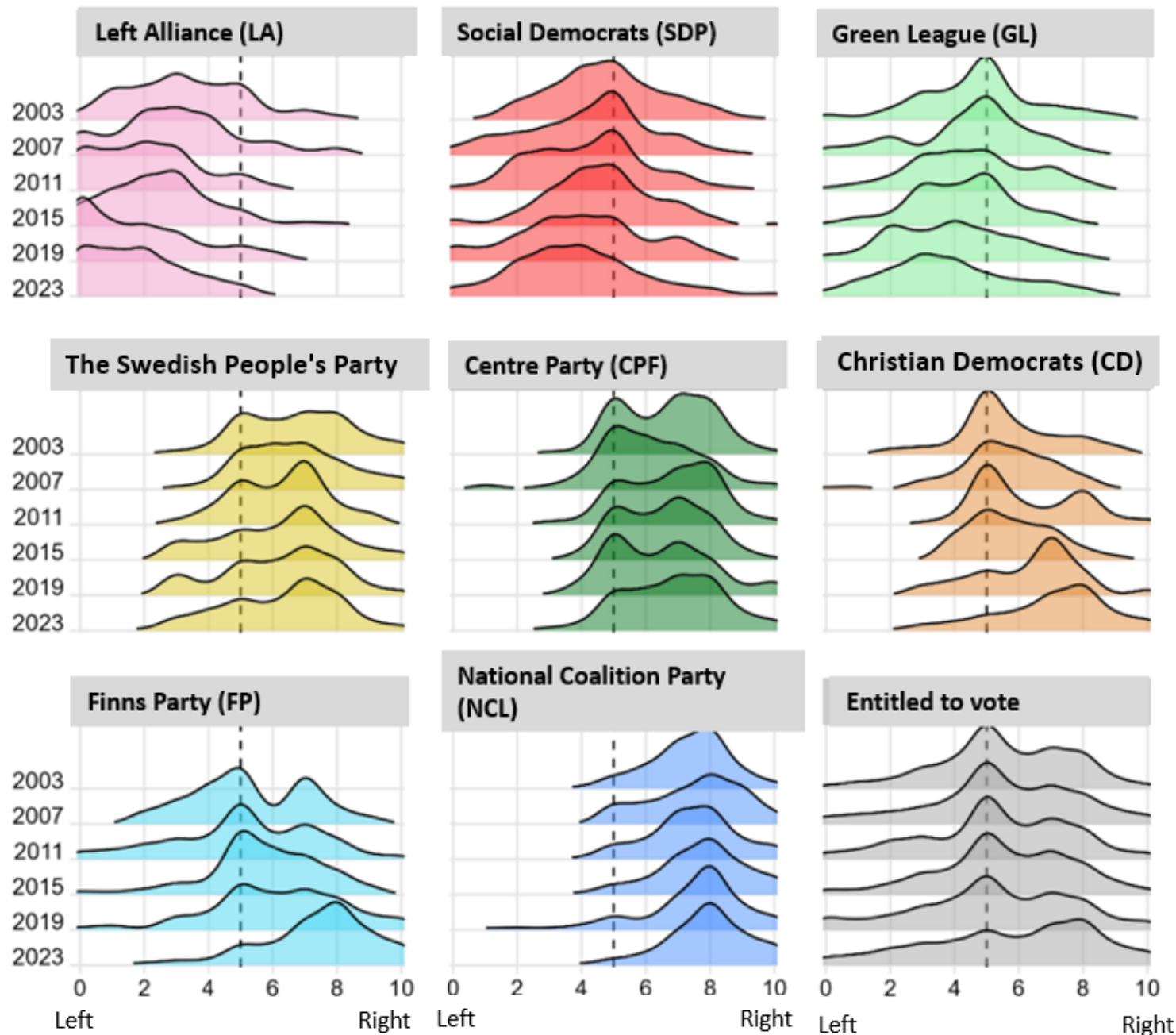


# Trust, SES and climate attitudes

- Lower SES typically predicts lower trust in public institutions
- Lower political trust predicts less support for climate policies
- Some evidence that media trust relates to more climate friendly attitudes among students (Fortner et al 2000, Scott-Parker et al. 2017)
- A link between mistrust in science and climate change denialism (e.g., Clulow and Reiner 2022, Huber et al. 2022)
- In the US, mistrust in science explains the gap between voters' climate policy attitudes (Bugden 2022)

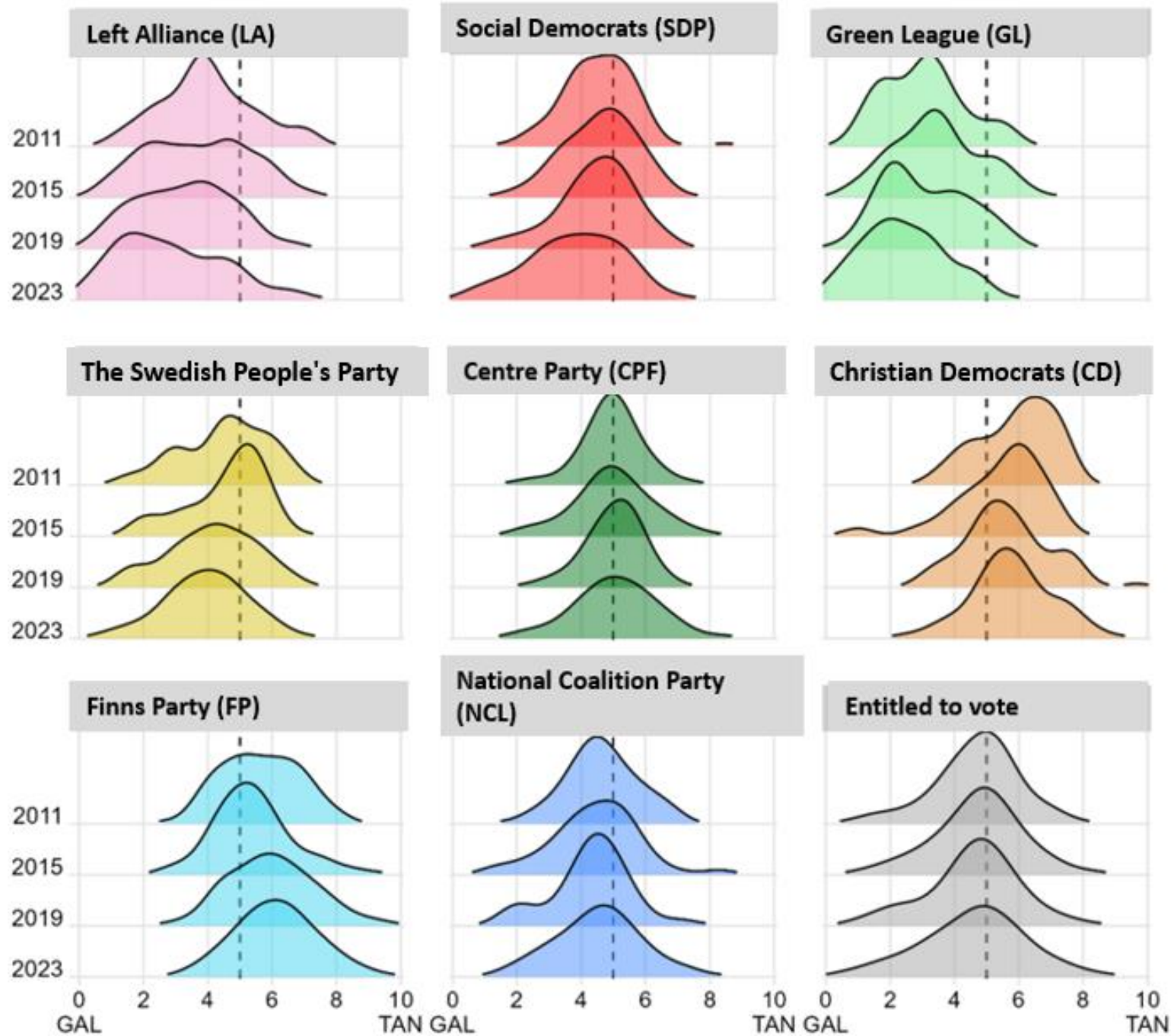


Ranking of voters on the left-right dimension (0–10) by party in the parliamentary elections (from 2003 to 2023)





Placement of voters on the GAL–TAN dimension in the parliamentary elections (2011, 2015, 2019 and 2023)



# Rationale and research questions

- Trust in scientific institutions more likely enhances beliefs that climate change is real and positive attitudes towards taking climate change action, while distrust in media, scientific or political institutions likely decreases this willingness and these attitudes
- RQ1: Are climate concern and trust in political institutions, (traditional) media, and science associated?
- RQ2: Are different socio-economic variables associated with low climate concern and low trust in political institutions, (traditional) media, and science?





# Data



Probability sampled *Social Aspects of Climate Nudge* survey in Finland (2023)



20 000 questionnaires were sent



Respondents chose either paper or online questionnaire



6021 respondents (response rate 30 %)

# Methods

- Logistic regression
  - with average marginal effects (AME) and interaction effects
- Weight that balances age and gender biases was used

# Measures: climate concern

## Are you worried about climate change?

1=I am not at all worried, 4.5%

2=I am not very worried, 12.5%

3=I am slightly worried, 39.8%

4=I am very worried, 27.6%

5=I am extremely worried, 16%

→ Respondents answering 1 or 2 (altogether 16.7%), were classified to "Low climate concern"-category





# Measures: trust

## To what extent do you trust the following?

(1='I have no trust at all', 10='I have great trust')

### 1. (Finnish) parliament, political parties, government

- political trust (sum variable, converted to scale 1-10) (mean 5.8, 37.7 % answered 5 or lower trust)

### 2. Traditional news media (newspapers, television, radio)

- media trust (mean 6.6, 27.6 % answered 5 or lower trust)

### 3. Universities and research institutes in general

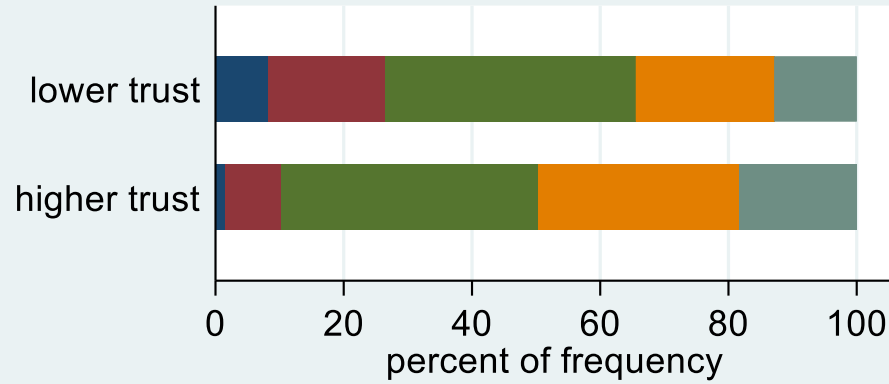
- science trust (mean 7.9, 11.8 % answered 5 or lower trust)

→ Respondents answering 1-5, were classified to "Low (political/media/science) trust"-category

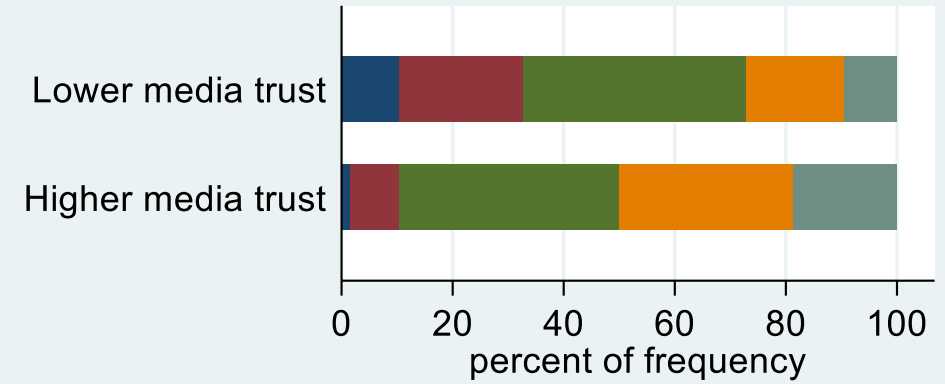


Associations between elements of trust and climate concern. Finns aged 20-85 years (N=6 021)

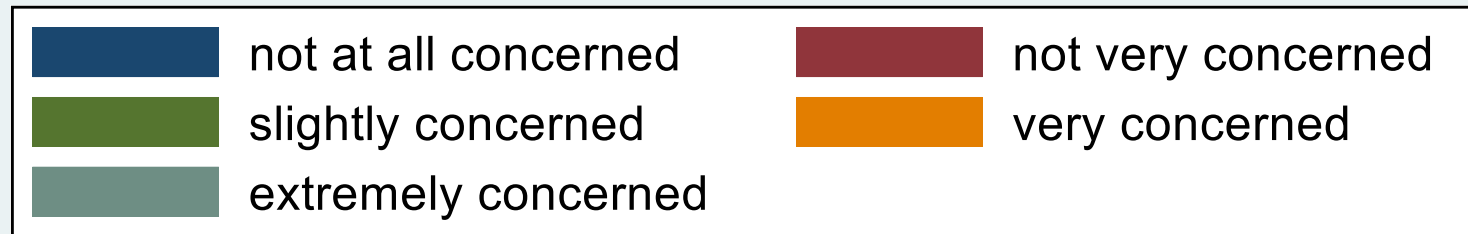
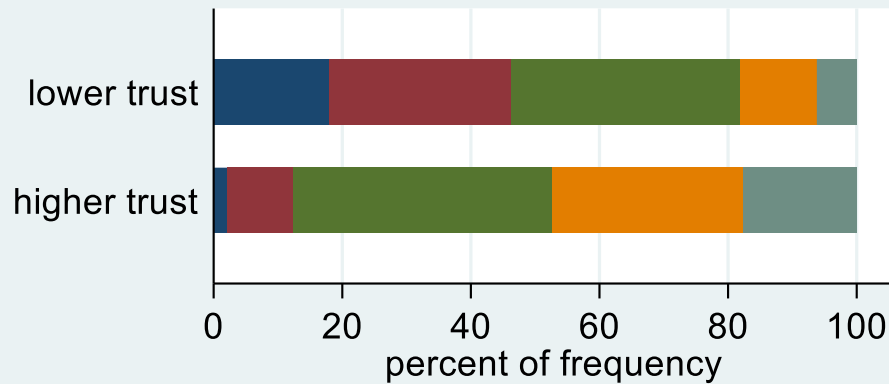
Political trust & climate concern



Media trust & climate concern



Science trust & climate concern



Spearman correlations between political trust & cc: 0.22, media trust & cc: 0.28, science trust & cc: 0.31



# Dependent variables

- We combined those with low climate concern and low (political/media/science) trust to three different dependent variables:
  - Low climate concern & low political trust (544, 9.9% belong to the category)
  - Low climate concern & low media trust (505, 9.0% belong to the category)
  - Low climate concern & low science trust (299, 5.4% belong to the category)

# Independent variables

- Education (primary 12.8%, vocational 34.6%, matriculation 10.7%, bachelor 20.5%, higher 21.5%)
- Assessment of financial situation (very poor 2.8%, quite poor 8.0%, moderate 37.9%, quite good 39%, very good 13.3%)
- Gender (women 50.9 %, men 49.1%)
- Age group (20–41 [23.6%], 42–63 [33.2%], 64–85 [44.3%])
- Life satisfaction (1 not at all satisfied – 10 completely satisfied) (mean 7.9)
- Political party preference
  - Left Alliance (LA) (left-of-centre-left), 7.8%
  - Social Democrats (SDP) (centre-left), 20.7%
  - Green League (GL) (green-centre-left), 9.5%
  - Centre Party (CPF) (rural-centrist), 9.8%
  - National Coalition Party (NCL) (centre-right), 19.33%
  - Finns Party (FP) (populist-right), 13.7%
  - [Other (13.1%), None (6.6%)]



# Associated with higher probability to belong to the group...

## 1. Low climate concern & political trust

- Vocational education (ref. comprehensive school)
- Male gender
- Age group 20-41 (ref. 64-85)
- Support The Finns party (ref. National Coalition Party)
- Lower life satisfaction

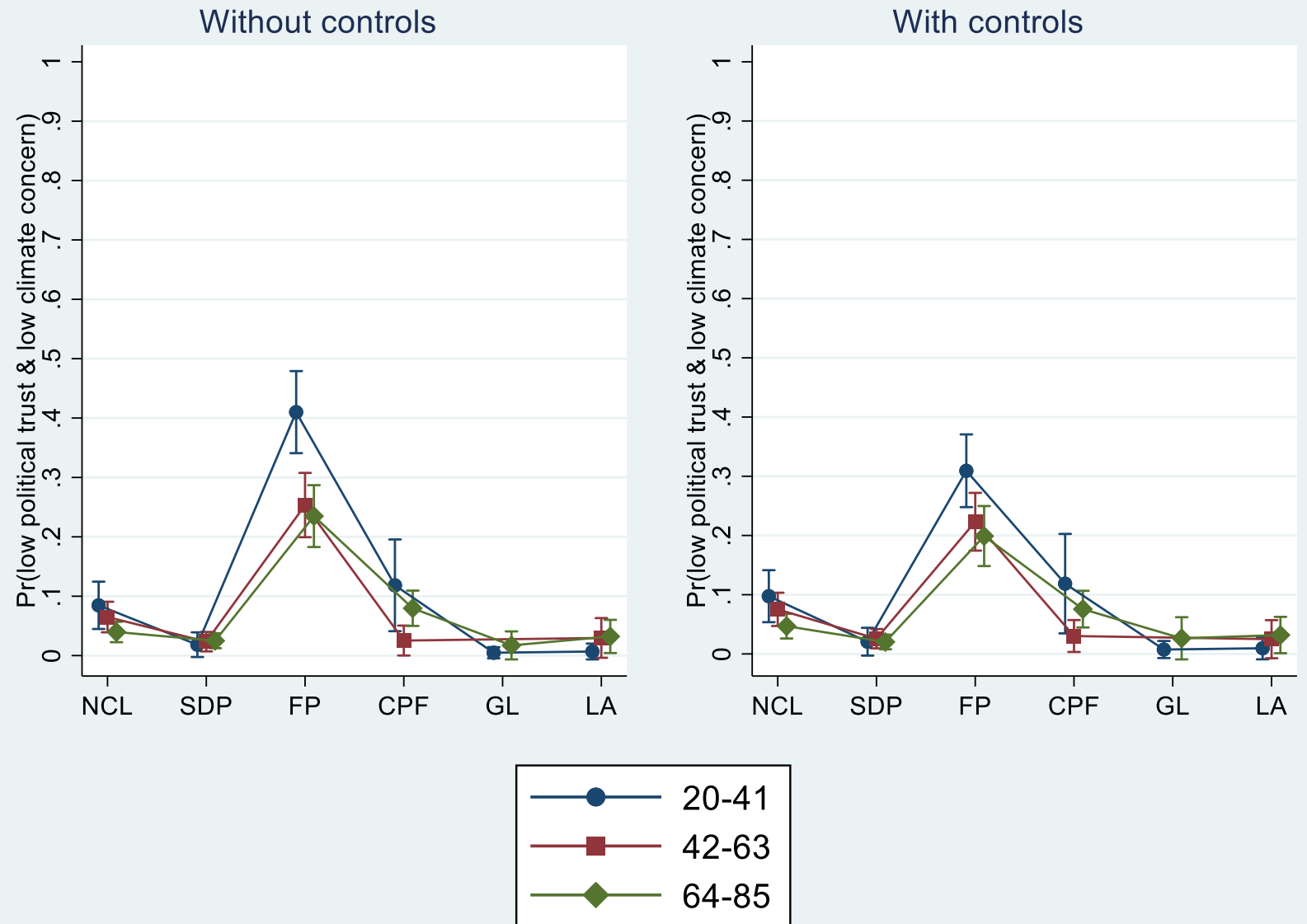
## 2. Low climate concern & media trust

- Poor subjective financial situation (ref. Moderate)
- Male gender
- Age group 20-41 (ref. 64-85)
- Support The Finns party (ref. National Coalition Party)

## 3. Low climate concern & science trust

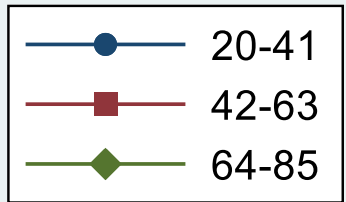
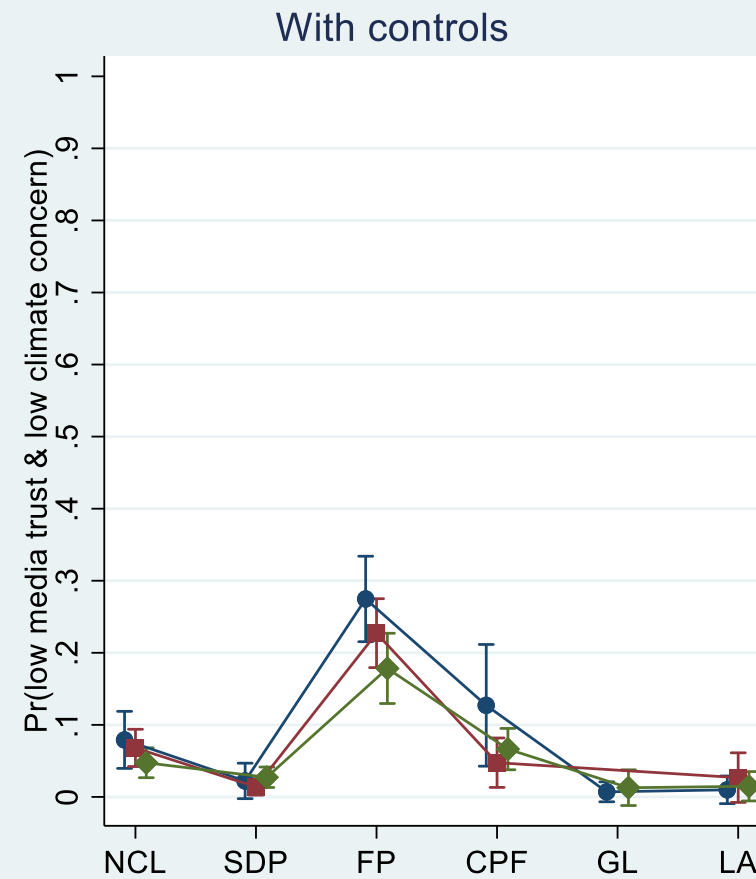
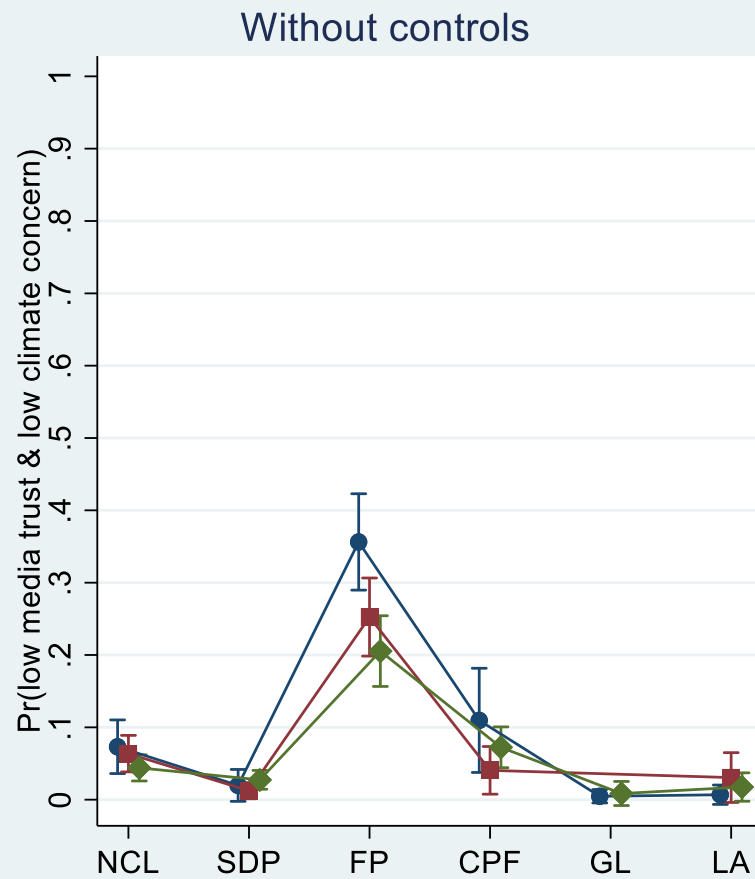
- Male gender
- Support The Finns party (ref. National Coalition Party)

# Probability to have low climate concern & political trust

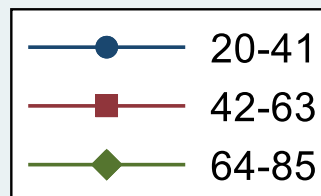
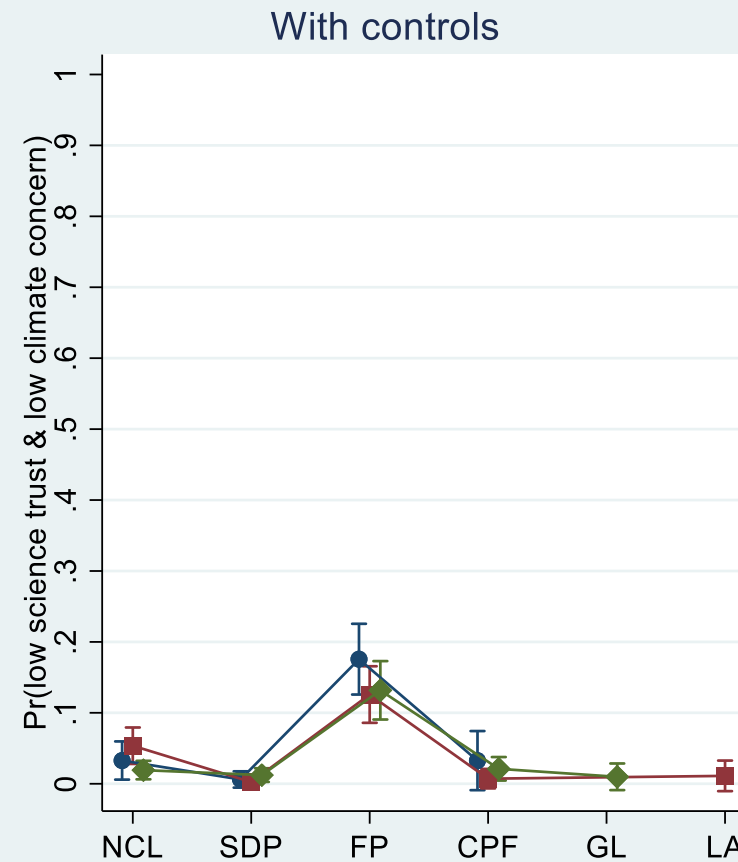
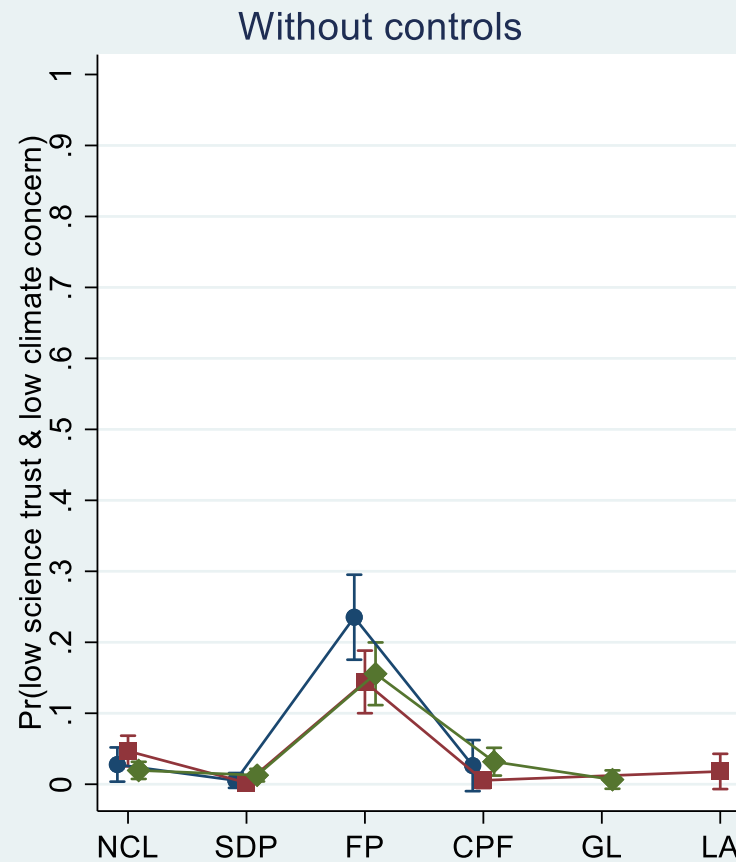




# Probability to have low climate concern & media trust



# Probability to have low climate concern & science trust



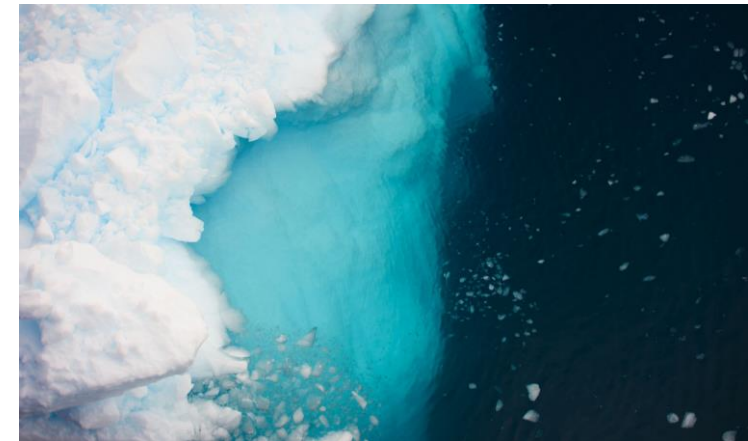


# Summary

- Supporting a populist party, younger age, and male gender were the most significant predictors of belonging to "low climate concern & low trust in institutions"-category
  - These characteristics were more significant than socio-economic variables
  - Green and socialist party supporters were least likely to belong to the "low concern & low trust" category
- Low concern & trust appear to be strongly associated with social identities

# Discussion

- An international phenomenon that was evident in other welfare states can be identified in a high trusting country as well
- An earlier study also suggests that people with low trust in science who consider themselves to be knowledgeable on climate change form a distinctive group in terms of climate attitudes
- Currently, perhaps only a symptomatic group (of especially young, national-conservative males) but with potential of larger resonance in the population
- Yet, also this study shows that Finland remains high on trust in key institutions (plus an insignificant n of climate change deniers): especially trust in science on a high level (7.9/10)





# Limitations and merits

- Cross-sectional
- Relatively low participation rate
- Does not allow causal reasoning
- Merits include:
  - Random population sample
  - Large number of respondents
  - Wide age coverage of adults (up to 85)
  - Established sets of questions

# References

- Bugden, D. Denial and distrust: explaining the partisan climate gap. (2022) *Climatic Change* 170, 34. <https://doi.org/10.1007/s10584-022-03321-2>
- Clulow, Z & Reiner, DM. (2022). How to distinguish climate sceptics, antivaxxers, and persistent sceptics: Evidence from a multi-country survey of public attitudes. <https://www.jstor.org/stable/pdf/resrep39514.pdf>
- Fortner RW., Lee J-Y., Corney JR., Romanello S., Bonnell J., Luthy B., Fiquerido C. & Ntsiko N. (2000) Public Understanding of Climate Change: Certainty and willingness to act, *Environmental Education Research*, 6:2, 127-141, DOI: [10.1080/713664673](https://doi.org/10.1080/713664673)
- Gough, I. Climate change and sustainable welfare: the centrality of human needs, *Cambridge Journal of Economics*, Volume 39, Issue 5, September 2015, Pages 1191–1214, <https://doi.org/10.1093/cje/bev039>
- Huber, RA., Greussing, E. & Eberl, J-E. (2022) From populism to climate scepticism: the role of institutional trust and attitudes towards science, *Environmental Politics*, 31:7, 1115-1138, DOI: [10.1080/09644016.2021.1978200](https://doi.org/10.1080/09644016.2021.1978200)
- Kestilä-Kekkonen E and Consortium (2023) Finnish National Election Study.
- Newman, N., Fletcher, R., Robertson, CT., Eddy, K., & Kleis Nielsen, R. (2022). Reuters Institute Digital News Report 2022. Reuters Institute. [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2022-06/Digital\\_News-Report\\_2022.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2022-06/Digital_News-Report_2022.pdf)
- Scott-Parker, B., Nunn, PD., Mulgrew, K. *et al.* Pacific Islanders' understanding of climate change: Where do they source information and to what extent do they trust it?. *Reg Environ Change* 17, 1005–1015 (2017). <https://doi.org/10.1007/s10113-016-1001-8>
- Sivonen, J. (2023) Public attitudes on climate policy instruments: A comparative perspective in Europe. Doctoral Thesis. University of Turku. [utupub.fi/handle/10024/175830](https://utupub.fi/handle/10024/175830)
- Sivonen, J., Härmä V., Karvonen, S. (2023) In science we trust – Exploring climate nudge attitudes in Finland, submitted



Thank you for your  
attention!

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