The Dual Evolutionary Foundations of Political Ideology
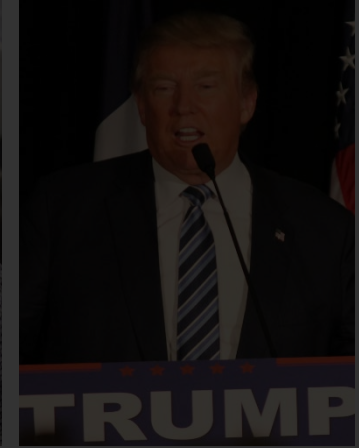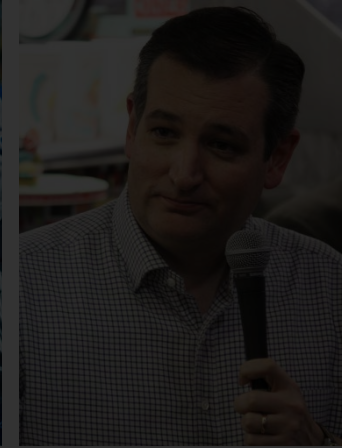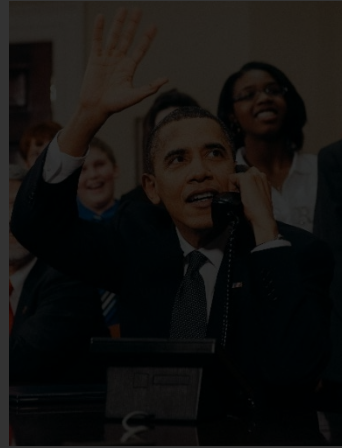
Research team

- Ananish Chaudhuri
- Quentin Atkinson
- Chris Sibley
- Scott Claessens
- Kyle Fischer

THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

Quo tendimus
(Where are we going?)
Background and road map
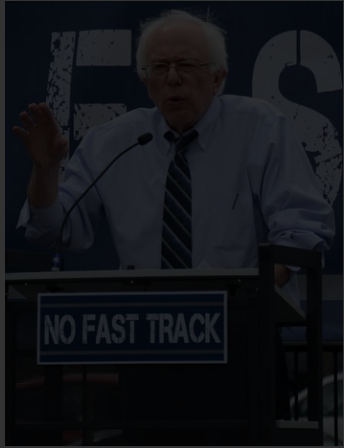
Liberal

Conservative

Low internal consistency
Low external validity
More than one factor in factor analyses

Moral Foundations Theory
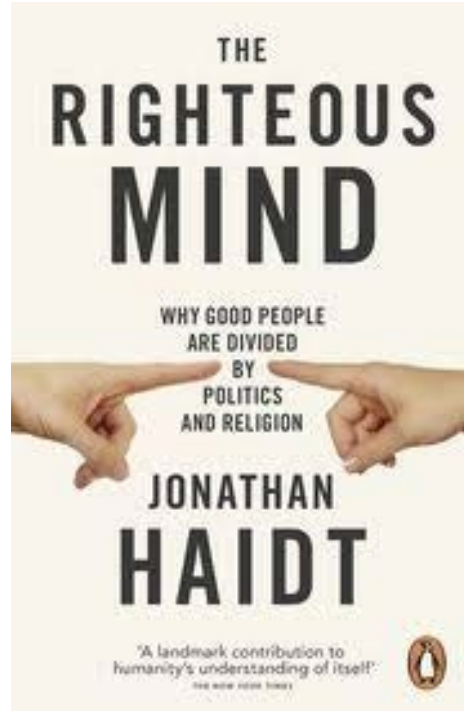
Harm
Fairness

Ingroup Loyalty
Authority
Sanctity

Liberals, Conservatives And the Five Moral Foundations
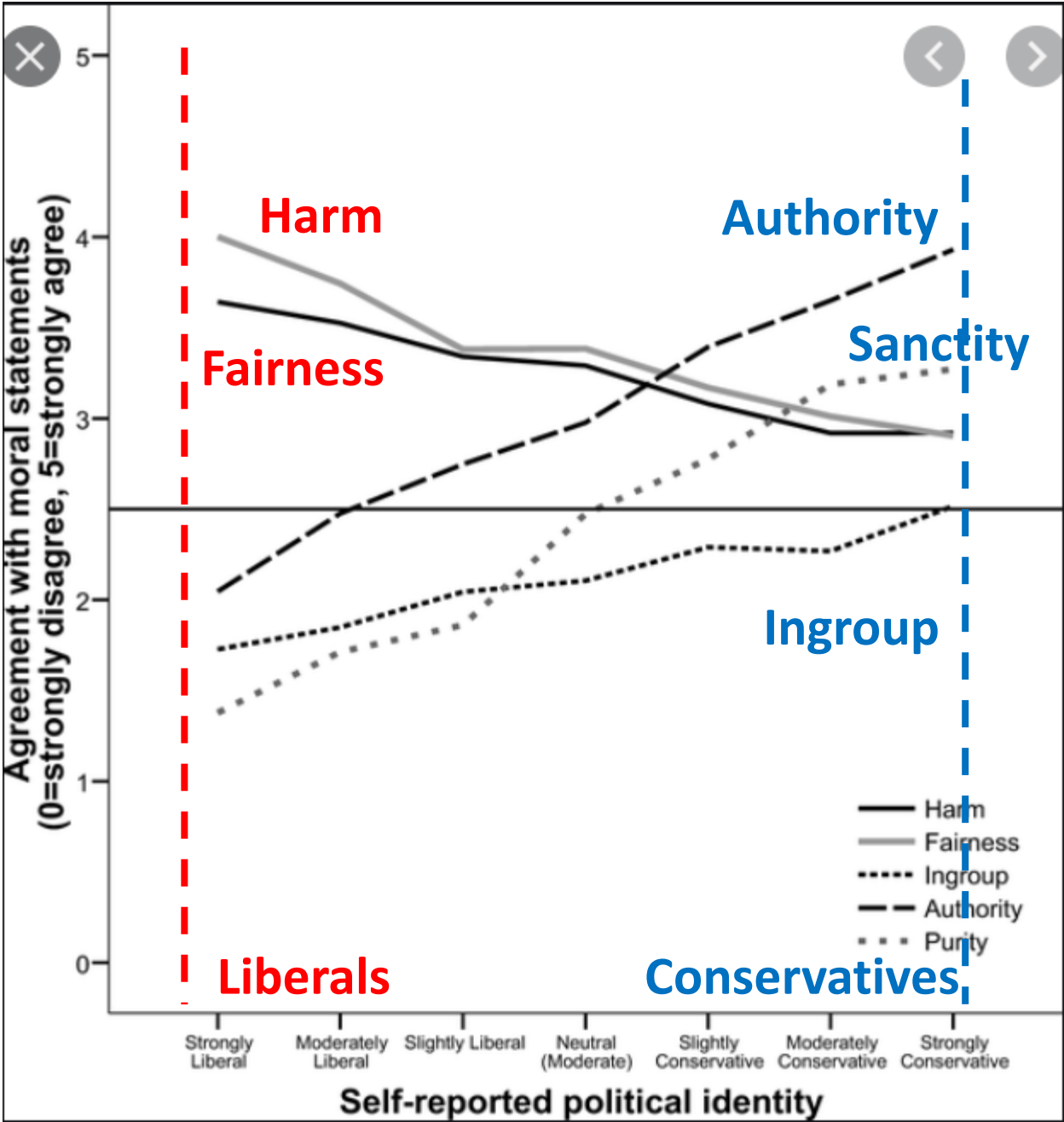
The dual foundations of political ideology

Claessens, S., Fischer, K, Chaudhuri, A., Sibley, C. and Atkinson, Q (2020a). The dual evolutionary foundations of political ideology. *Nature Human Behavior*, 4, 336–345 (2020).

Evidence from diverse areas of the social sciences suggests that there are two distinct dimensions to political ideology

Economic conservatism

+

-          +   Social conservatism

Social Progressivism

-          Economic Progressivism
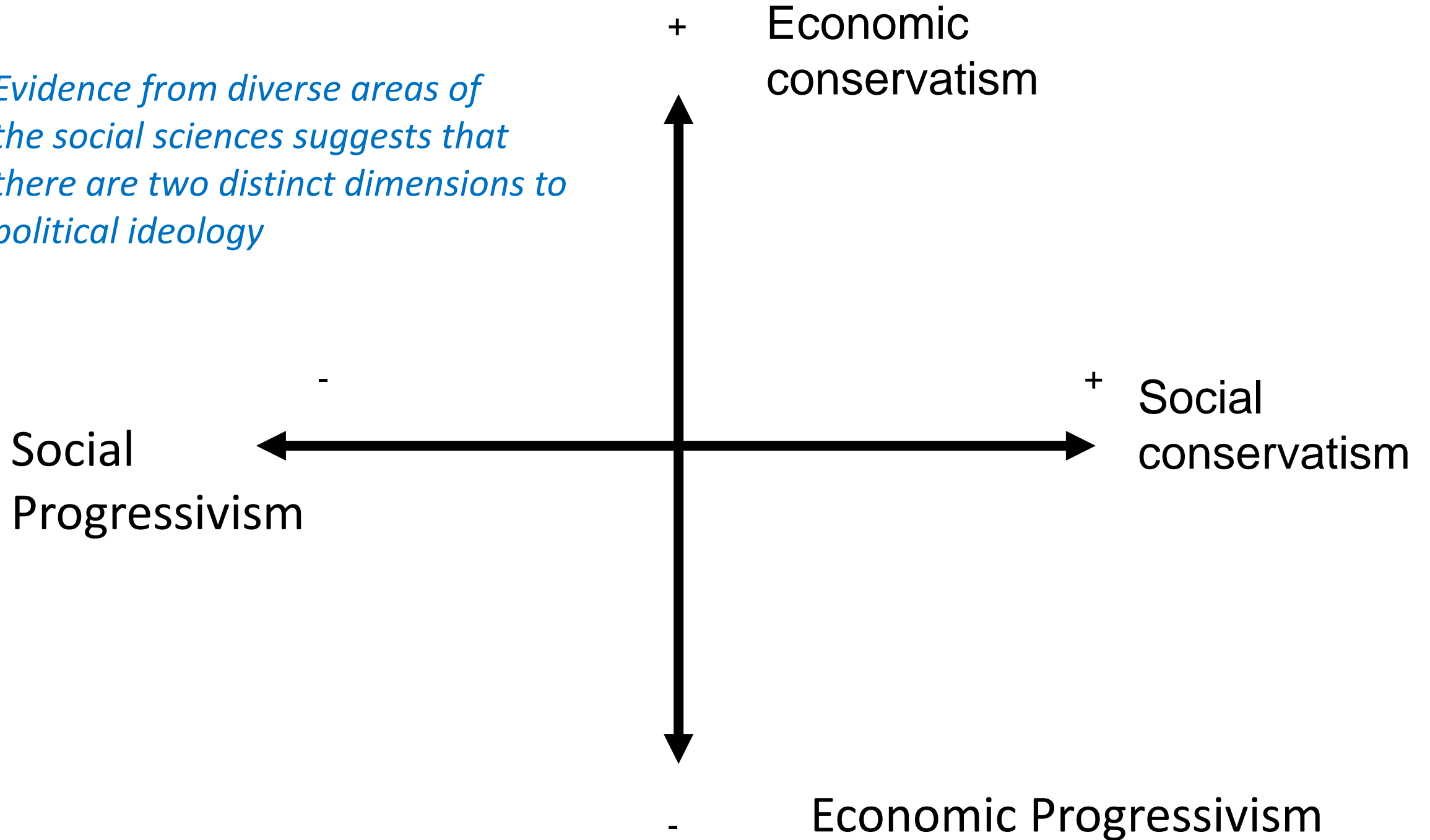
Why do these two dimensions specifically underlie political ideology in humans?

What is politics?

"If we think of social life as a game, political behavior aims to negotiate the rules of that game: who is entitled to get what, when and how? … Politics is produced by adaptations designed to solve the coordination problems that emerge from **group living**" (Petersen, 2015)

Two unique aspects of human group living

1. Cooperation

- Willingness to incur personal cost to benefit others

- Cooperate/coordinate with non-kin

- Prefer interacting with cooperative others

- Pro-social preferences

Two unique aspects of human group living

2. Group conformity

- Adhere to group-wide social norms

- Feel shame and guilt when we violate social norms

- Punish norm violators

- Delineate the in-group using cultural markers

The two dimensions of political ideology

- The first *"cooperative/competitive"* dimension is concerned with cooperating more across wider interdependent networks (beyond close kin) and sharing the spoils of cooperation more evenly.

- In our ancestral past, individuals had to constantly navigate cooperative dilemmas, such as collaborative foraging and meat sharing, and determine how to share the spoils of cooperation.

- *This preference for cooperation underlies economically progressive policies such as progressive income taxation, income redistribution, the welfare state and pro-environmentalism.*

The two dimensions of political ideology

- The second dimension is concerned with ***group conformity/group survival.***

- For early humans living in highly interdependent social groups, it was vital to abide by group-wide social norms, sanction norm-violators, and defend the group against outsiders.

- ***Today, we expect that analogous concerns about group viability will manifest themselves in attitudes regarding traditional social values, criminal justice, patriotism, and national security.***
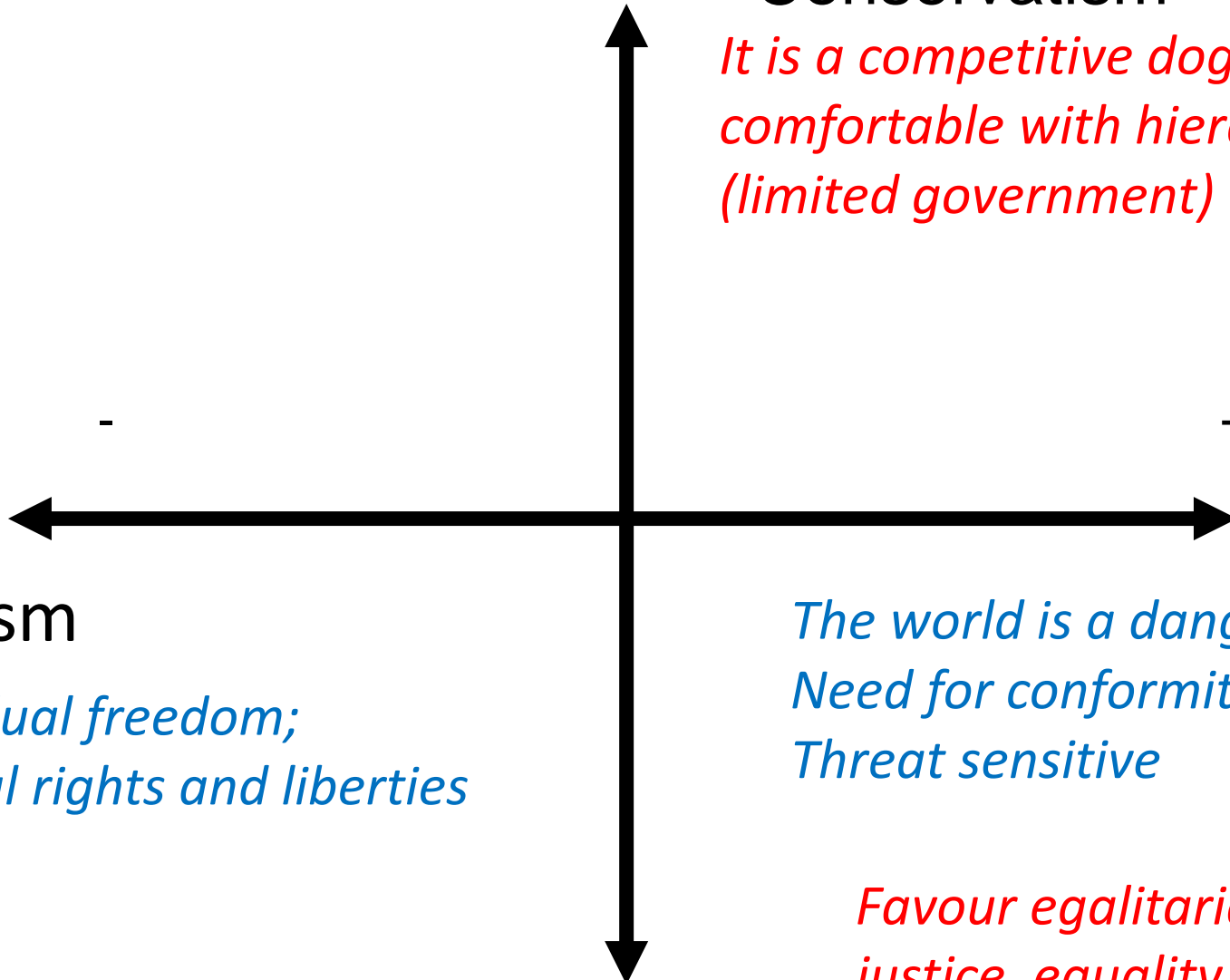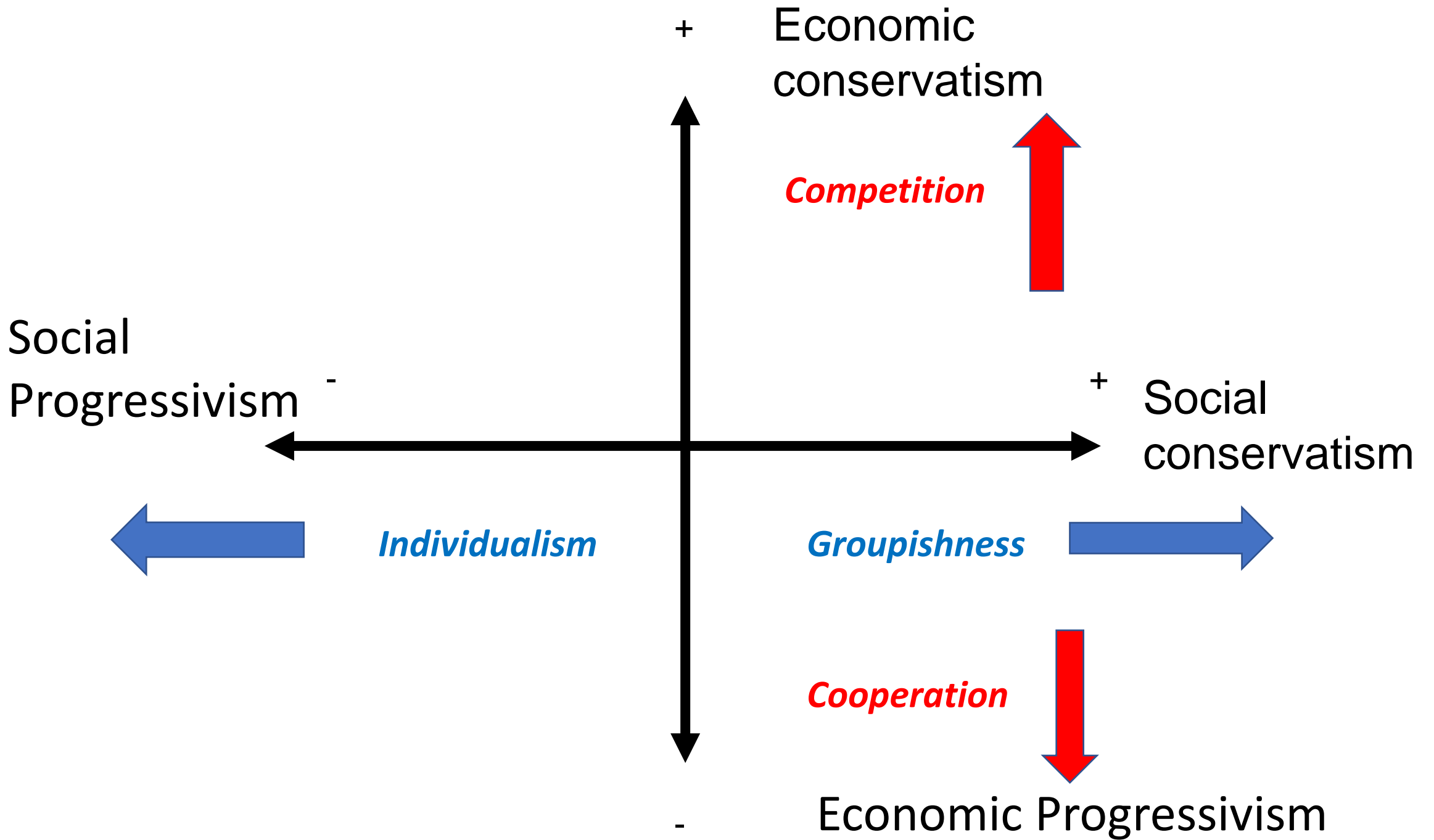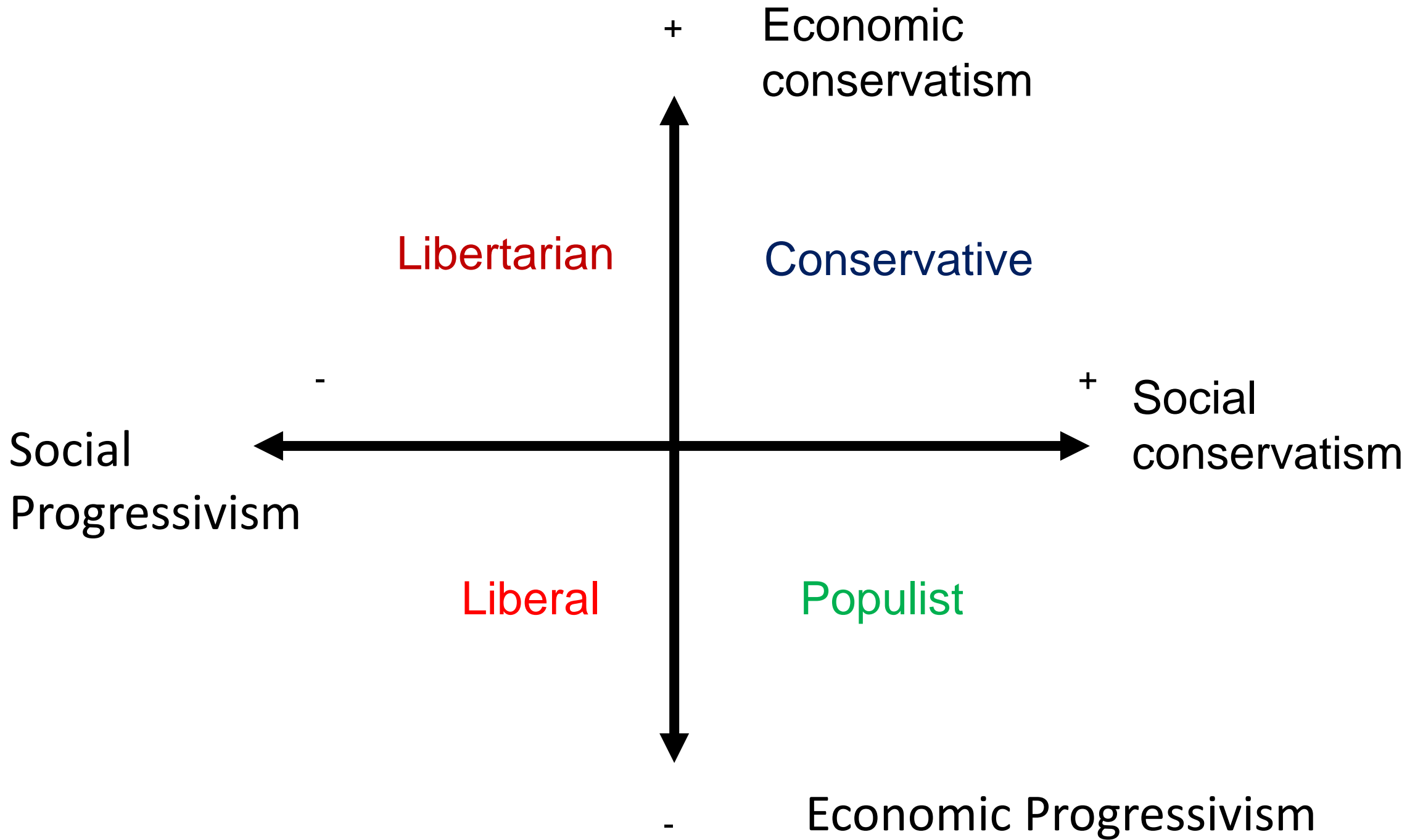
Understanding observed variation

- Libertarians in the US support *"economically conservative"* views on free-markets and pro-business policies but also hold *"socially progressive"* views on abortion, same-sex marriage and gender roles.

- In Europe on the other hand, people are increasingly supporting political parties that are *"economically progressive"* in the sense of supporting redistribution and promoting the welfare state while at the same time displaying *"socially conservative"* views in the form of opposing ethnic diversity.

Understanding observed variation

- Functional variation in such political preferences can be maintained by

- *Balancing selection via fitness trade-offs* creating enduring inheritable individual differences

- Or *Behavioural plasticity* in response to local socio-ecological conditions.

- Both genes and environment (culture) together predict strategic variation in cooperation and group conformity in human populations.

Cooperative phenotype predicts economic conservatism, policy views and political party support.

Measures

Social Dominance Orientation (SDO):
Measure of Economic Conservatism
(Lack of Helping/Cooperation); those high in
SDO display lower degrees of help/cooperation.
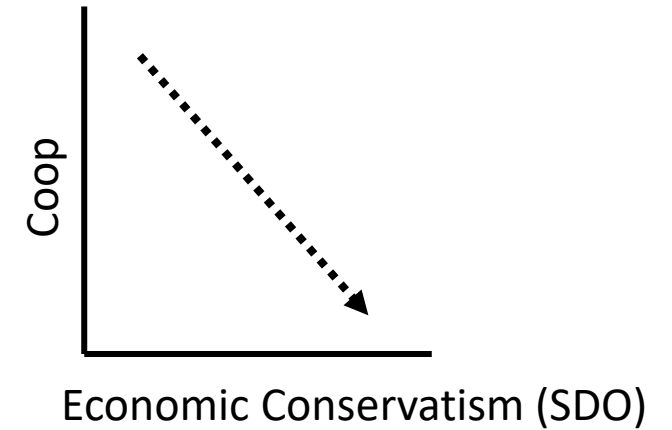
Right Wing Authoritarianism (RWA):
Measure of Group Conformism and
proclivity to punish norm violators; those
high in RWA more willing to punish
norm violators.
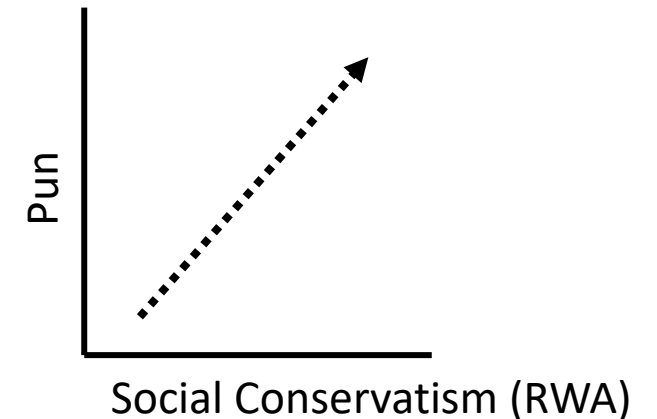
SDO scale

- It is OK if some groups have more of a chance in life than others.
- Inferior groups should stay in their place.
- To get ahead in life, it is sometimes okay to step on other groups.
- We should have increased social equality.
- It would be good if groups could be equal.
- We should do what we can to equalise conditions for different groups.

SDO scale

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- We should have increased social equality.
- It would be good if groups could be equal.
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RWA scale

- It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds.

- It would be best for everyone if the proper authorities censored magazines so that people could not get their hands on trashy and disgusting material.

- Atheists and others who have rebelled against established religions are no doubt every bit as good and virtuous as those who attend church regularly.

- Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the "normal way" things are supposed to be done.

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The NZAVS Economic Decisions Project

New Zealand Attitudes and Values Study (n = 926)

Eight online real-time behavioural economic games

- Help/Cooperation games
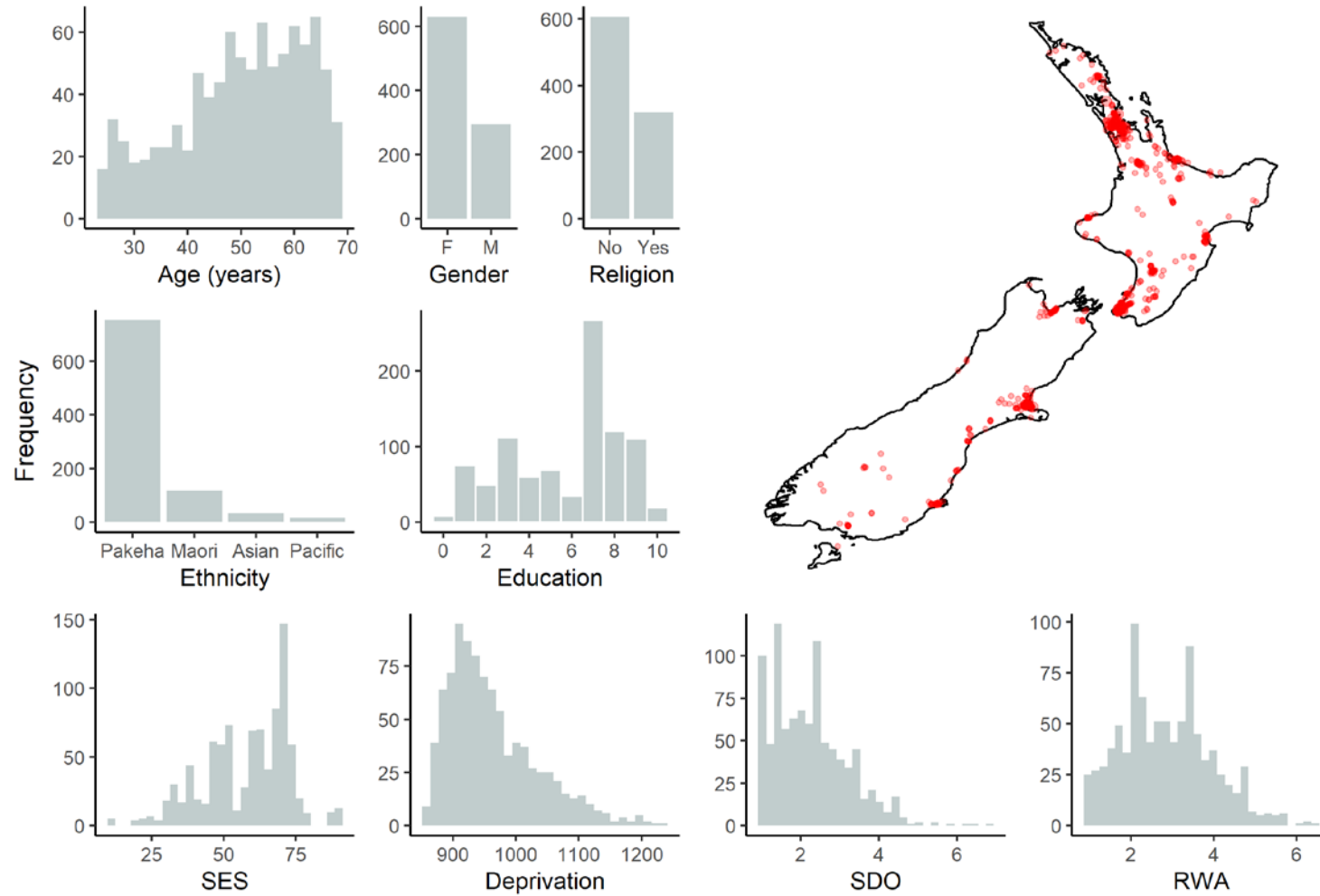 - Dictator Game (Pairs)
  - Trust Game (Pairs)
  - Public Goods Game (4-person groups)
  - Stag Hunt Game (Pairs)
- Norm-enforcing punishment games
  - Ultimatum Game (Pairs)
  - Third-Party Punishment Game (Triples)
  - Second-Party Punishment Game (Pairs)
  - Stag Hunt Game with Punishment (Pairs)

The NZAVS Economic Decisions Project

Hypotheses

- H1: Behaviour in these eight different games will load onto two latent variables: *(1) willingness to incur a cost to help others; competition/cooperation dimension); (2) willingness to incur a cost to punish norm-violators; conformity/individualism dimension)*

- H2: The SDO scale will be negatively correlated with variations in the first latent variable. Higher scores on the SDO scale will be negatively associated with cooperative behaviour.

- H3: The RWA scale will be positively correlated with variations in the second latent variable. Higher scores on the RWA scale will be positively associated with willingness to punish norm-violators.

Coop

Economic Conservatism (SDO)

Pun

Social Conservatism (RWA)
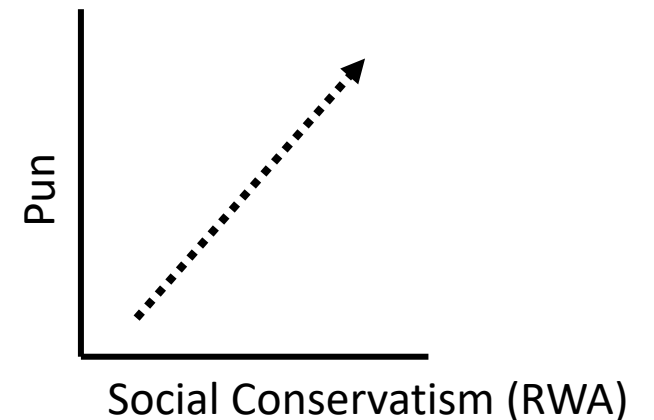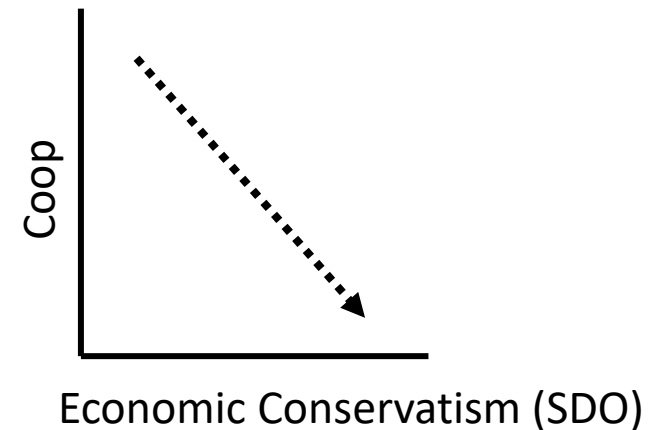
Experimental design

- Played on-line

- Participants log in at pre-arranged times

- Typically groups of 60 or similar (multiples of 3 and 4)

- Participants only know that they are paired with other NZAVS members

- All decisions made using *"strategy"* method

- Once all decisions entered, participants matched randomly and provided feedback regarding choices and earnings

- No feedback between games

- Money transferred to bank account the next day

Hypothesis 1: *Games will load onto two latent factors*

	Factor 1	Factor 2
Dictator Game (dg)	.67	
Trust Game – Give (tg1)	.65	
Trust Game – Return (tg2)	.63	
Public Goods Game (pgg)	.55	
Stag Hunt Game (sh)	.52	
Ultimatum Game – MAO (ug2)		.55
Third Party Punishment (tpp2)		.61
Second Party Punishment (spp3)		.71
Stag Hunt with Punishment (shp3)		.79
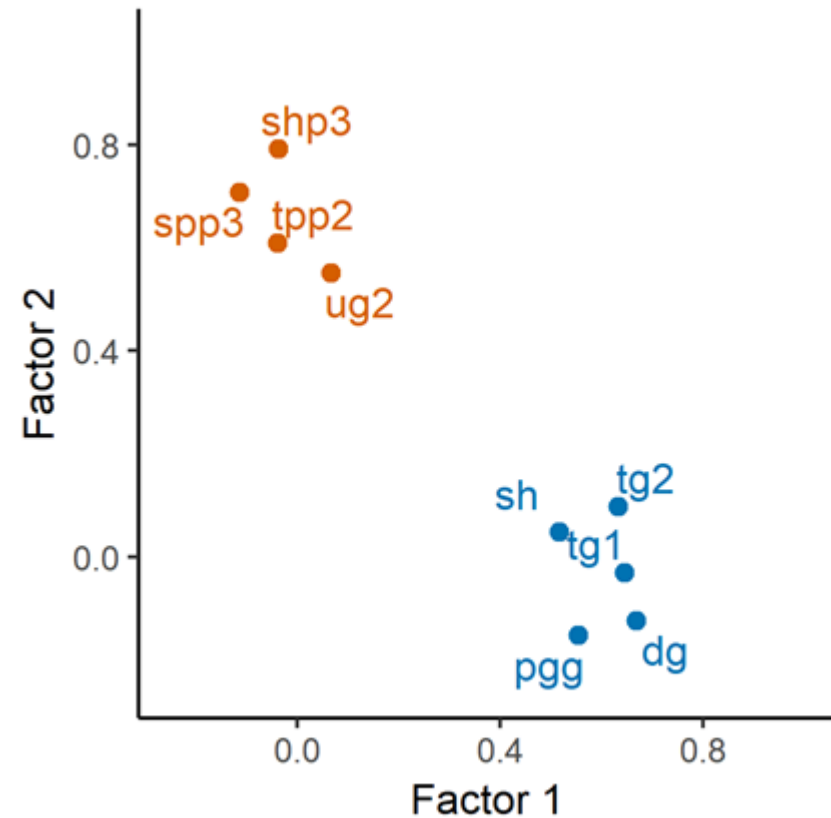
Hypothesis 2

Economic conservatism (as measured by SDO) will predict the cooperation factor; SDO will be negatively correlated with cooperation
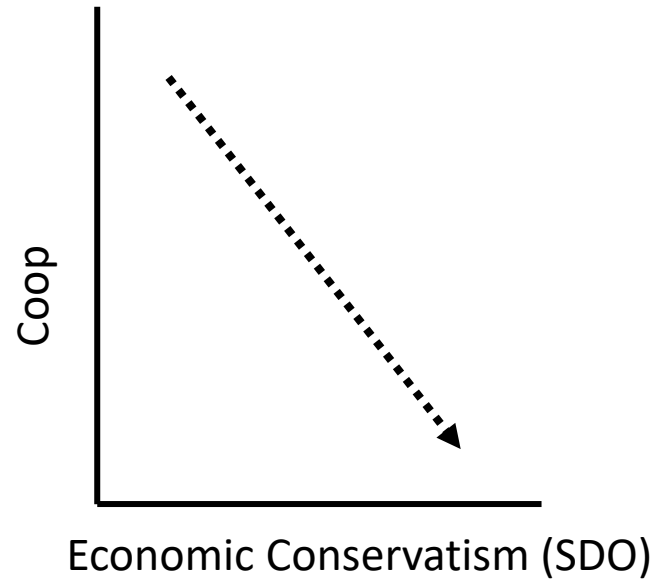
Hypothesis 2
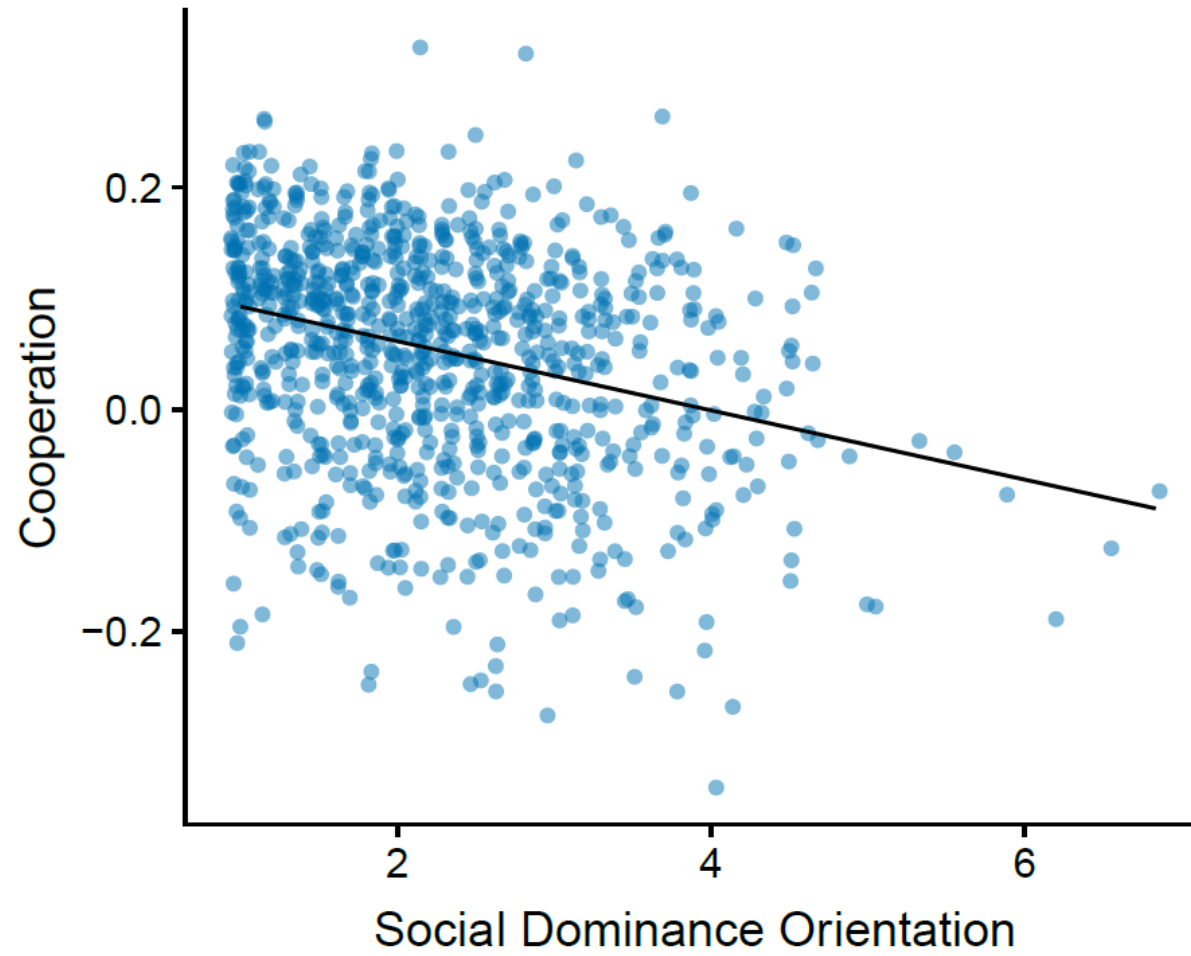
Hypothesis 2
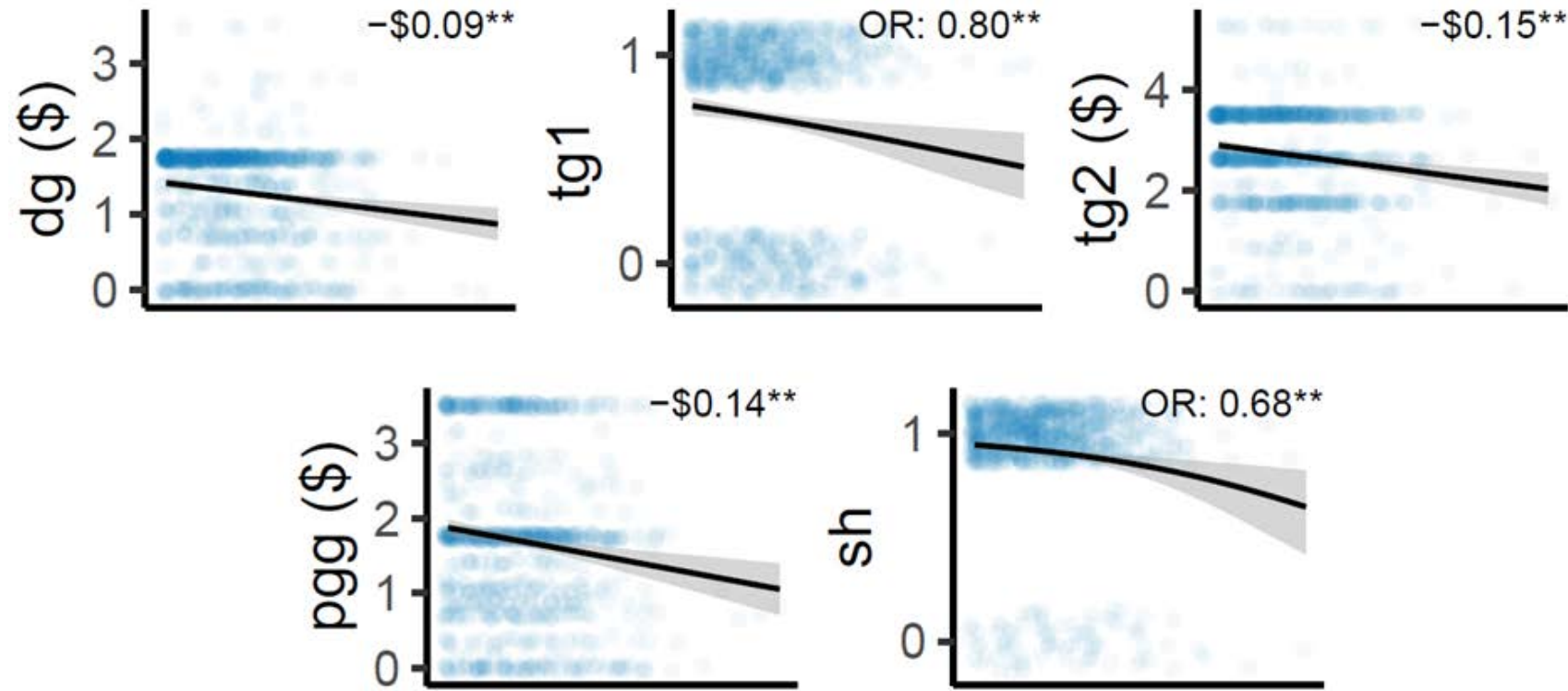
Social Dominance Orientation

Hypothesis 2
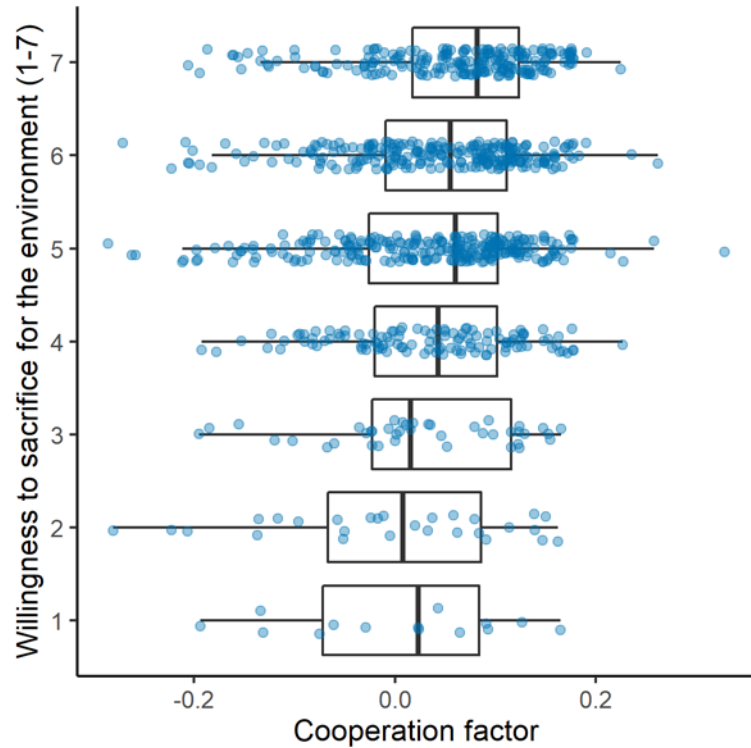
b = 1.33 [0.63 2.03],
p < .001, *r* = .14
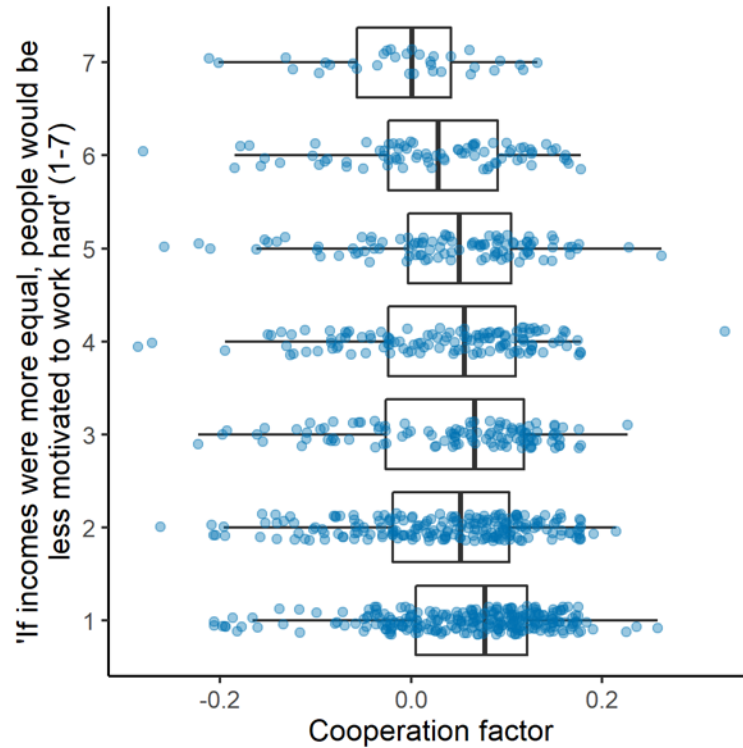
b = -1.46 [-2.09 -0.83],
p < .001, *r* = .17
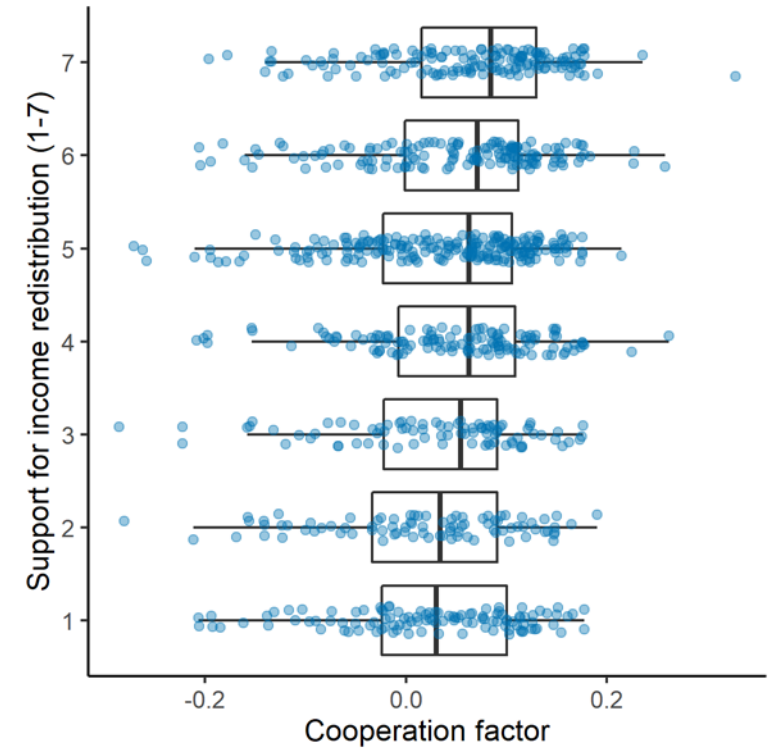
b = 1.14 [0.52 1.77],
p < .001, *r* = .12

Hypothesis 2

Strong support for hypothesis that Economic conservatism (as measured by SDO) will predict the cooperation factor; SDO will be negatively correlated with cooperation
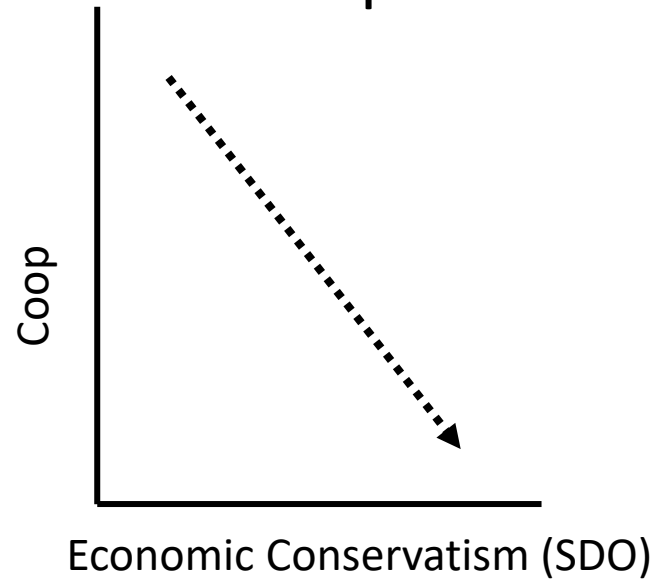
Cooperation, SDO and Political Party Support
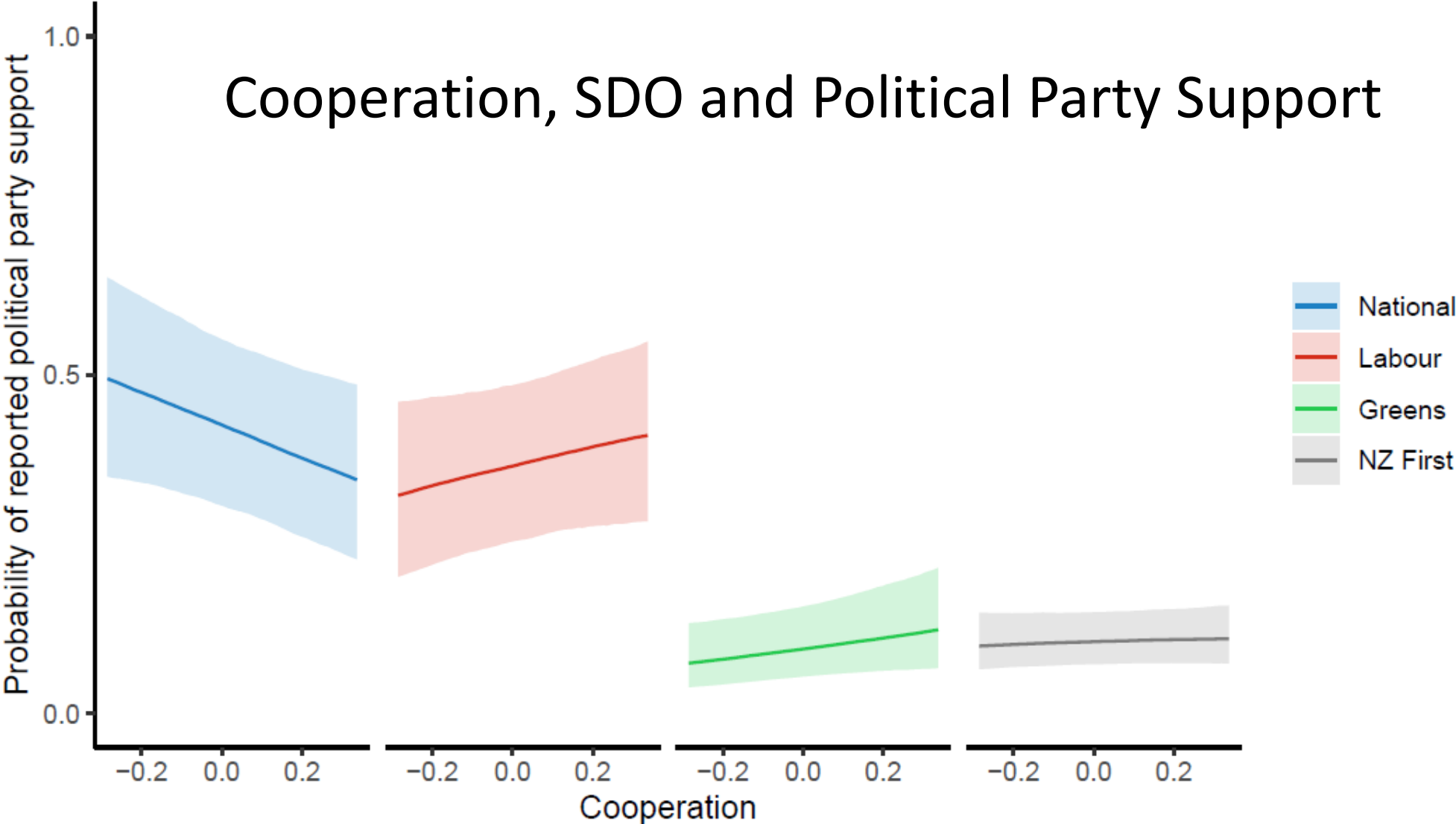
Hypothesis 3

Social conservatism (as measured by RWA) will predict the norm-enforcing punishment factor; those high in RWA will punish more.

Hypothesis 3

b = 0.001 [-0.001 0.003],
β = 0.04, *p* = .30, *r* = .06
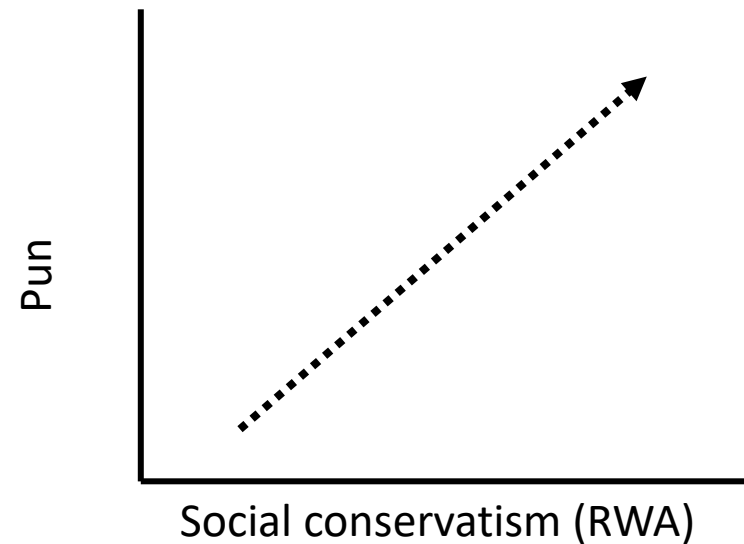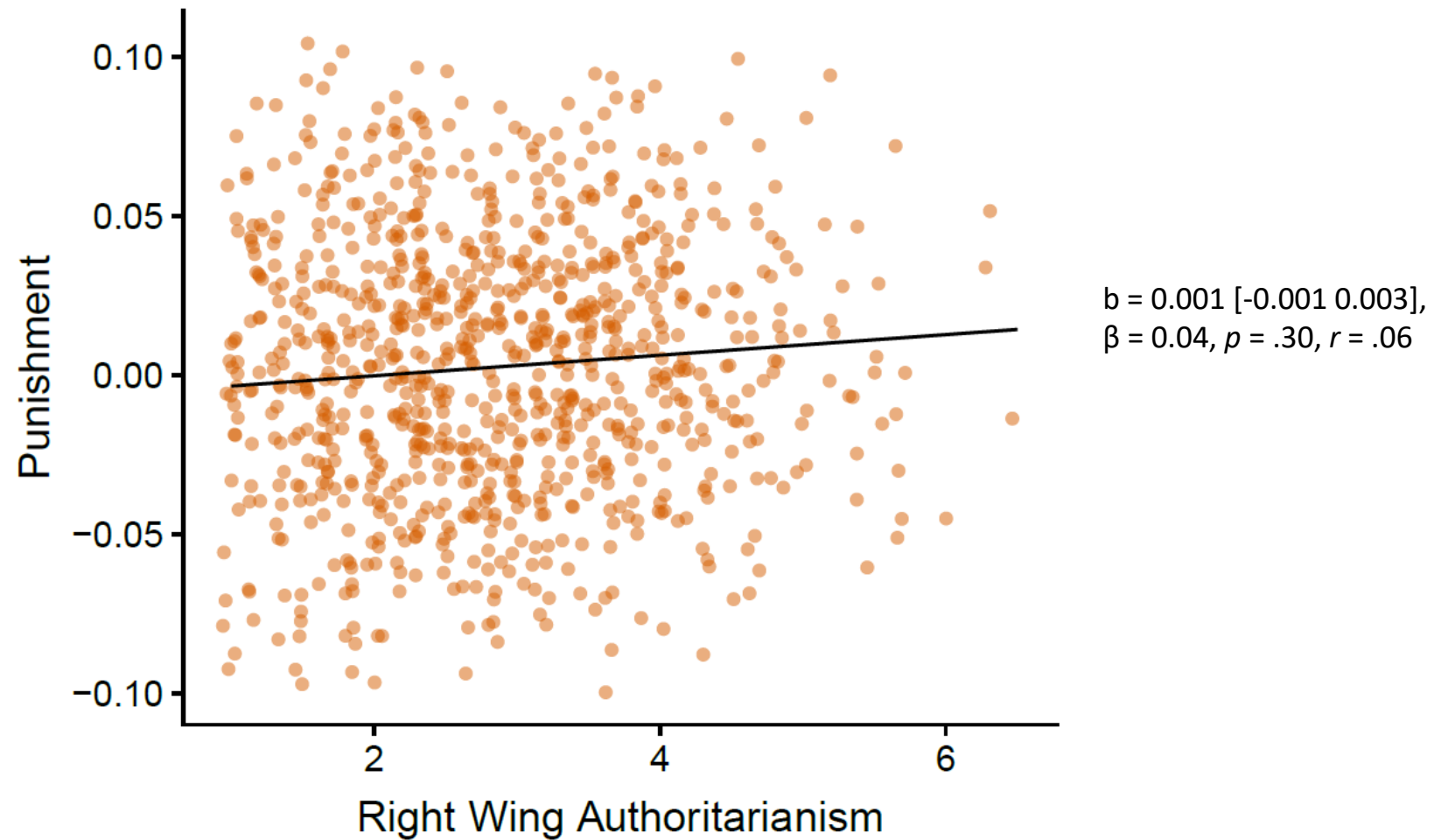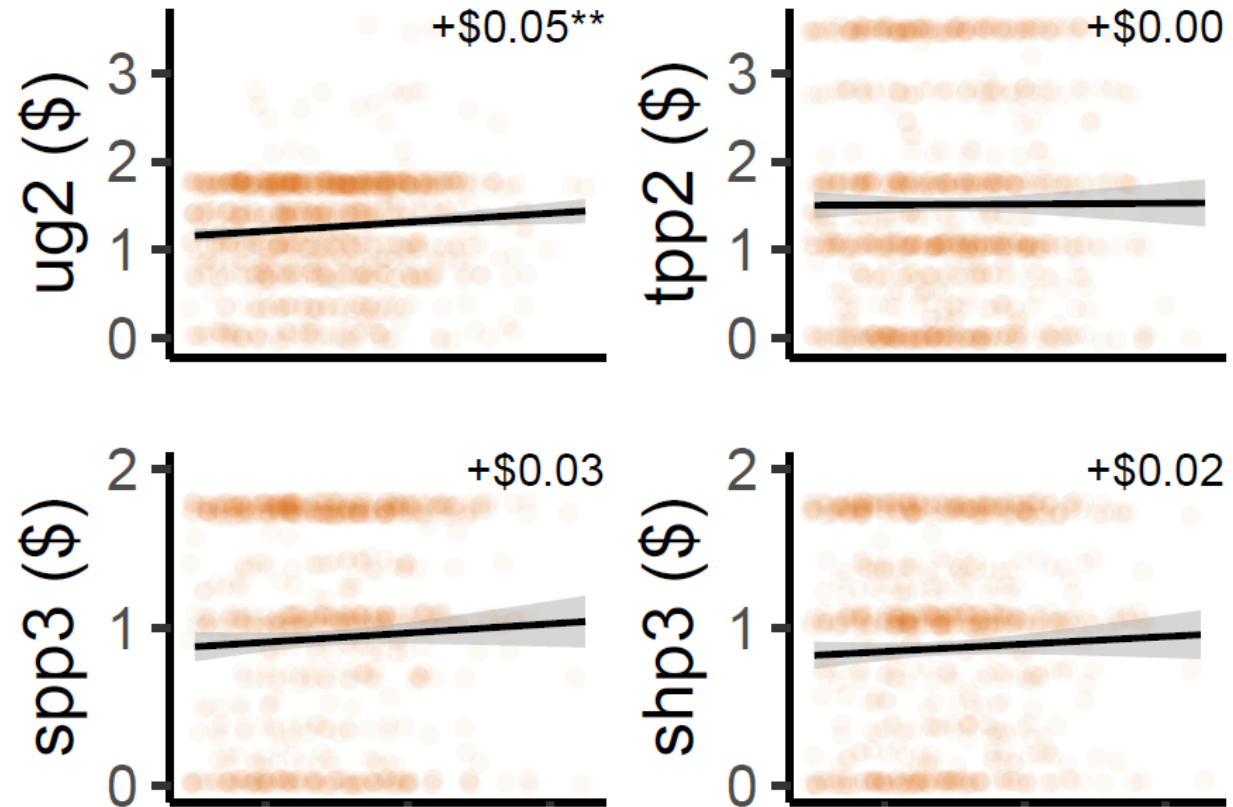
Hypothesis 3

Right Wing Authoritarianism

Hypothesis 3
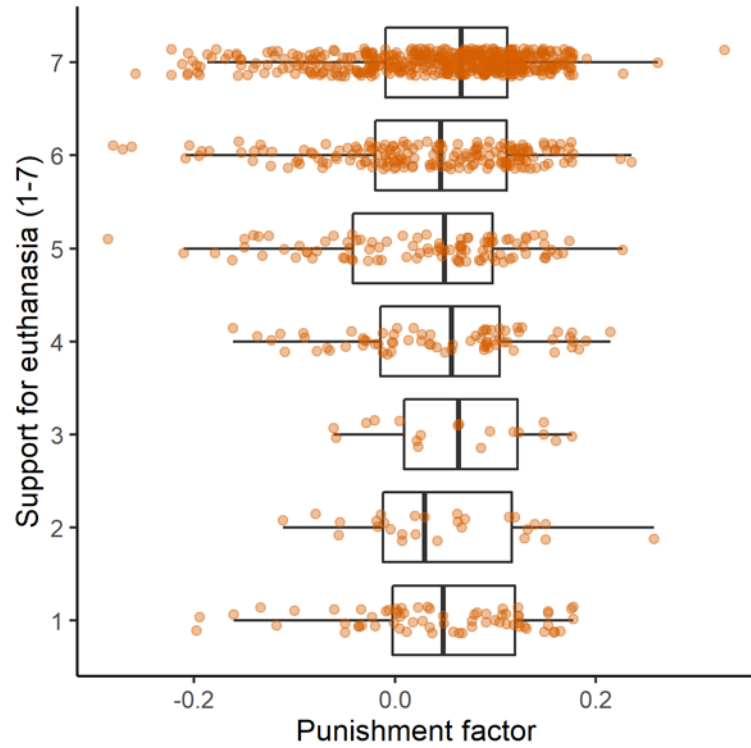
b = 1.16 [-1.69 4.01],
p = .42, *r* = .04
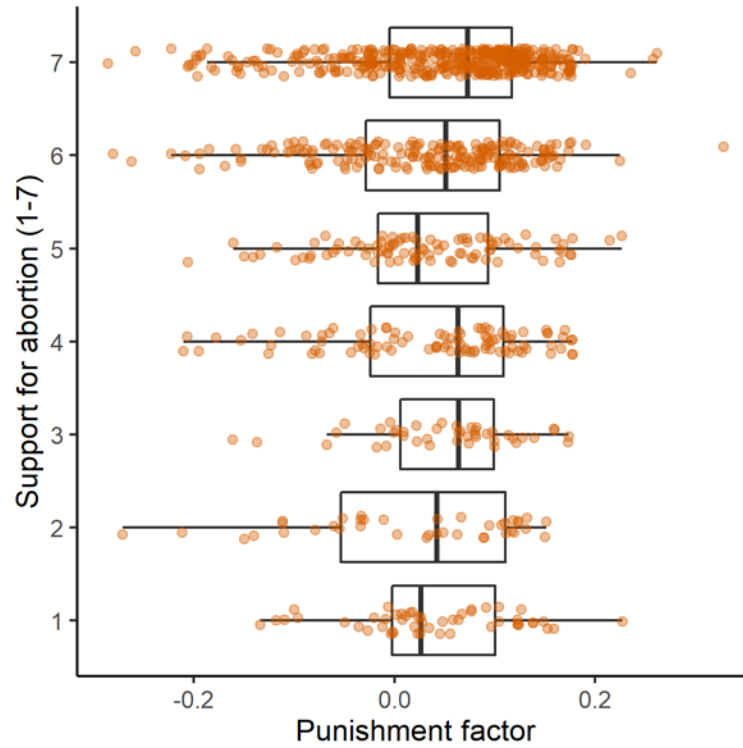
b = -1.09 [-4.02 1.85],
p = .47, *r* = .00
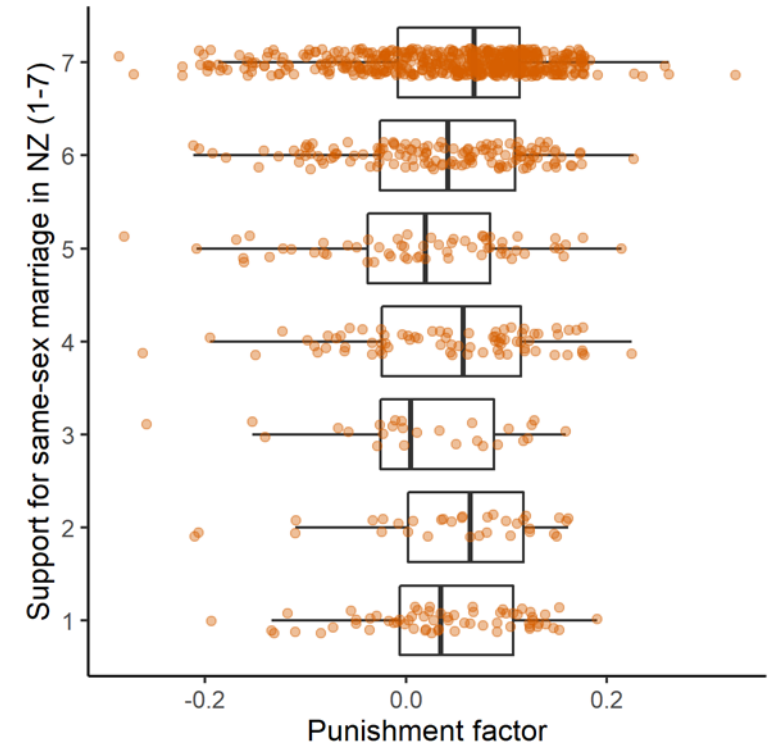
b = -1.11 [-4.07 1.86],
p = .46, *r* = .01

Hypothesis 3

- We find little support for the hypothesis that social conservatism (as measured by RWA) will predict the norm-enforcing punishment factor, i.e., those high in RWA will punish more.

- It may be that punishment in economic games provide a competitive function, increasing individuals' relative payoffs over others.

- In hindsight, there are several reasons to favour a competitive-punishment account over a normative-punishment account in this study.

Hypothesis 3

- We used one-shot games with anonymous others in which there was no possibility for signaling, reputation building, or future behaviour modification; all considered essential behind the success of norm-enforcing punishment to enhance cooperation.

- One needs a relatively long horizon for norm-enforcing punishments to increase cooperation beyond what would prevail in the absence of such punishments.

- In one-shot anonymous games, then, punishment may be an attempt to equalize payoffs rather than enforce norms to shape later behaviour.

The dual foundations of political ideology and parochial versus universal cooperation

Work in Progress

What does RWA measure?

- Team money allocation game – Aaldering and Boehm (2019)

- A variant of the public goods game (a social dilemma game)

- Relies on the minimal group paradigm of Tajfel and Turner

- Allows us to look at egoism, in-group love, out-group hate and universalism

Subjects indicate whether they prefer paintings by Paul Klee or Wassily Kandinsky

Team money allocation game

- Groups of eight
- Four in the Klee Team
- Four in the Kandinsky Team
- Multiple rounds
- Endowed with a fixed amount of points for each of those rounds
- Can allocate the endowment to different pools
- Points converted to money at the end of the session
- **Run using Prolific (https://prolific.co) with mostly UK based participants**

Team money allocation game (member of Klee team)

Pool A

Pool B

Pool C

Pool D

Each point in Pool A generates 0.5 points for each member of Klee team including yourself; has no effect on Kandinsky team.

Each point in Pool B generates 0.5 points for each member of Klee team including yourself; Reduces payoff for each member of Kandinsky team by 0.25 points.

Each point in Pool C generates 0.4 points for each member of Klee team as well as 0.4 points for each member of Kandinsky team.

Each point in Pool D generates 1 point only for yourself.

Team money allocation game (member of Klee team)

For each point allocated to a pool

Pool A	Pool B

Pool C	Pool D

Pool	You get	Each member Of your team gets	Each member of other team gets
A	0.5	0.5	0
B	0.5	0.5	-0.25
C	0.4	0.4	0.4
D	1	0	0

Team money allocation game (member of Klee team)

For each point allocated to a pool

Pool	You get	Each member Of your team gets	Each member of other team gets
A	0.5	0.5	0
B	0.5	0.5	-0.25
C	0.4	0.4	0.4
D	1	0	0

Pool A
Ingroup love

Pool B
Outgroup hate

Pool C
Universal love

Pool D
Egoism

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love		
Egoism vs Universal love		
Egoism vs Outgroup hate		
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love	*Predict: Egoism* ***Find: Egoism****	
Egoism vs Universal love		
Egoism vs Outgroup hate		
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love	*Predict: Egoism* **Find: Egoism****	
Egoism vs Universal love	*Predict: Egoism* **Find: Egoism****	
Egoism vs Outgroup hate		
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love	*Predict: Egoism* **Find: Egoism****	
Egoism vs Universal love	*Predict: Egoism* ***Find: Egoism*****	
Egoism vs Outgroup hate	*Predict: Egoism* ***Find: Egoism****	
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love	*Predict: Egoism* **Find: Egoism****	
Egoism vs Universal love	*Predict: Egoism* ***Find: Egoism*****	
Egoism vs Outgroup hate	*Predict: Egoism* ***Find: Egoism****	
Ingroup love vs outgroup hate	*Predict: Outgroup hate* **Find: Outgroup hate****	
Ingroup love vs Universal love	*Predict: Ingroup love* ***Find: Ingroup love*****	
Outgroup hate vs Universal love	*Predict: Outgroup hate* ***Find: Outgroup hate*****	

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love		*Predict: Ingroup love* **Find: No effect**
Egoism vs Universal love		
Egoism vs Outgroup hate		
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love		*Predict: Ingroup love* **Find: No effect**
Egoism vs Universal love		
Egoism vs Outgroup hate		
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love		*Predict: Ingroup love* **Find: No effect**
Egoism vs Universal love		*No prediction* Find: No effect
Egoism vs Outgroup hate		
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love		*Predict: Ingroup love* **Find: No effect**
Egoism vs Universal love		*No prediction* Find: No effect
Egoism vs Outgroup hate		Predict: Outgroup hate *Find: Outgroup hate*
Ingroup love vs outgroup hate		
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love		*Predict: Ingroup love* **Find: No effect**
Egoism vs Universal love		*No prediction* Find: No effect
Egoism vs Outgroup hate		Predict: Outgroup hate *Find: Outgroup hate*
Ingroup love vs outgroup hate		Predict: Ingroup love *Find: Outgroup hate***
Ingroup love vs Universal love		
Outgroup hate vs Universal love		

Binary Choices

Choice	SDO	RWA
Egoism vs Ingroup love		*Predict: Ingroup love* **Find: No effect**
Egoism vs Universal love		*No prediction* Find: No effect
Egoism vs Outgroup hate		Predict: Outgroup hate *Find: Outgroup hate*
Ingroup love vs outgroup hate		Predict: Ingroup love **Find: Outgroup hate****
Ingroup love vs Universal love		Predict: Ingroup love *Find: Ingroup love**
Outgroup hate vs Universal love		*Predict: Outgroup hate* *Find: Outgroup hate**

All four choices presented simultaneously

Choice	SDO	RWA
Ingroup love	---	+
Outgroup hate	+	+
Universalism	---	---
Egoism	+	---

AS **SDO increases** contributions to the ***Egoism and Outgroup hate*** pools increase.

As **RWA increases** contributions to the ***Ingroup Love and Outgroup hate*** pools increase.

Responses to the COVID-19 pandemic reflect the dual evolutionary foundations of political ideology

- **Prediction 1**:
- (a)*Economic progressives will display cooperative, empathic attitudes and policy preferences regarding COVID-19;*
- *(b) Social conservatives will display conformist, norm-enforcing attitudes and policy preferences regarding COVID-19.*

- **Prediction 2:** *Social (but not economic) conservatism will increase in response to both real and perceived threats posed by COVID-19.*

Cooperative, other regarding responses

- (A.1): The government should waive all insurance costs and hospital fees for testing and treating COVID-19

- (A.2): Paid leave should be granted to anyone diagnosed with coronavirus COVID-19

- (A.3): I am very concerned about those most vulnerable to COVID-19.

Conformist, norm-enforcing responses to COVID-19

- **Norm enforcing response:**
- (B.2): "I want my government to severely punish those who violate orders to stay at home."

- **Severe enforcement:**
- (B.3) "The army should be mobilised to enforce quarantines and rules regarding COVID-19".
- (B.4) "It is vital right now that the government strongly enforces social distancing measures".

Conformist, norm-enforcing responses to COVID-19

- **Support for lockdown:**
- (B.5) "I am upset at the thought that my government would force people to stay home against their will". *[reverse coded]*
- (B.6) "It makes me angry that the government would tell me where I can go and what I can do, even when there is a crisis such as COVID-19". *[reverse coded]*
- (B.7) "I support government measures to restrict the movement of UK citizens to limit the spread of COVID-19".
- (B.8) "It is important to follow the UK government's rules regarding COVID-19".
- (B.9) "Because of COVID-19, it is very important that others take physical distancing very seriously and limit all social contact".

Conformist, norm-enforcing responses to COVID-19

- **Strict Border Control:**
- (B.10) "All citizens of China should be banned from entering the UK while the COVID-19 pandemic is ongoing".
- (B.11) "All citizens of the USA should be banned from entering the UK while the COVID-19 pandemic is ongoing".
- (B.12) "Strict entry restrictions should be imposed at all borders while the COVID-19 pandemic is ongoing".

Predictor	β	Std Error	|t|	p	95% CI
Model 1: Mean cooperative other-regarding preferences					
RWA	0.04	0.06	0.66	0.508	[-0.06, 0.13]
SDO	*-0.36*	*0.06*	*6.44*	*<0.01*	*[-0.49, -0.25]*

Predictor	β	Std Error	|t|	p	95% CI
Model 1: Mean cooperative other-regarding preferences					
RWA	0.04	0.06	0.66	0.508	[-0.06, 0.13]
SDO	*-0.36*	*0.06*	*6.44*	*<0.01*	*[-0.49, -0.25]*
Model 2: Mean conformist norm enforcing responses					
RWA	*0.39*	*0.06*	*6.68*	*<0.01*	*[0.26, 0.50]*
SDO	*-0.21*	*0.06*	*3.62*	*<0.01*	*[-0.35, -0.08]*

Predictor	β	Std Error	|t|	p	95% CI
Model 1: Mean cooperative other-regarding preferences					
RWA	0.04	0.06	0.66	0.508	[-0.06, 0.13]
SDO	*-0.36*	*0.06*	*6.44*	*<0.01*	*[-0.49, -0.25]*
Model 2: Mean conformist norm enforcing responses					
RWA	*0.39*	*0.06*	*6.68*	*<0.01*	*[0.26, 0.50]*
SDO	*-0.21*	*0.06*	*3.62*	*<0.01*	*[-0.35, -0.08]*
Model 3: Support lockdown rules					
RWA	*0.18*	*0.06*	*3.05*	*0.02*	*[0.05, 0.29]*
SDO	*-0.30*	*0.06*	*5.09*	*<0.01*	*[-0.44, -0.15]*

Predictor	β	Std Error	|t|	p	95% CI
Model 1: Mean cooperative other-regarding preferences					
RWA	0.04	0.06	0.66	0.508	[-0.06, 0.13]
SDO	*-0.36*	*0.06*	*6.44*	*<0.01*	*[-0.49, -0.25]*
Model 2: Mean conformist norm enforcing responses					
RWA	*0.39*	*0.06*	*6.68*	*<0.01*	*[0.26, 0.50]*
SDO	*-0.21*	*0.06*	*3.62*	*<0.01*	*[-0.35, -0.08]*
Model 3: Support lockdown rules					
RWA	**0.18**	**0.06**	**3.05**	**0.02**	**[0.05, 0.29]**
SDO	*-0.30*	*0.06*	*5.09*	*<0.01*	*[-0.44, -0.15]*
Model 4: Support severe enforcement					
RWA	**0.47**	**0.05**	**8.73**	**<0.01**	**[0.35, 0.59]**
SDO	*-0.09*	*0.05*	*1.63*	*0.10*	*[-0.21, -0.04]*

Economic progressives are in favour of strong enforcement

- As expected, economic progressive show other-regarding empathetic responses

- Strong concordance in the views of social conservatives and economic progressives on strict enforcement

- Including military involvement if needed

- Significant increase in social conservatism pre- and post Covid-19

Concluding thoughts

- Economic Conservatives

High SDO

Low on cooperation
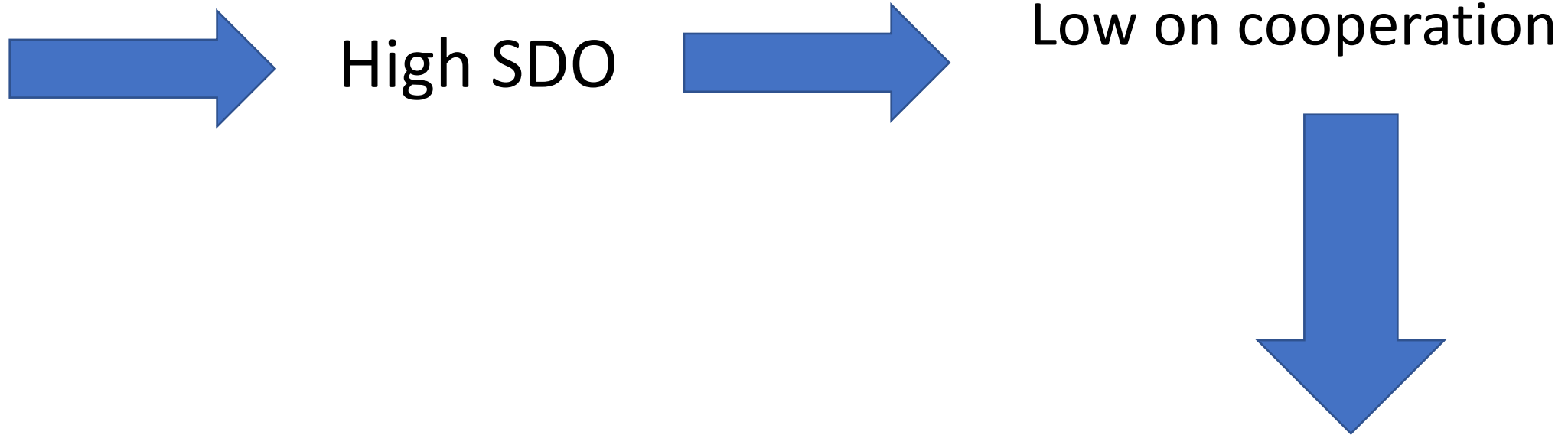
Unwilling to incur cost to benefit others; supportive of inequality;

Concluding thoughts

- Economic Conservatives

High SDO → Egoistic; world is a competitive jungle

- Social conservatives

High RWA → Group conformity
Outgroup hate; rather than
Punishment of norm violators

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Thank you!
Any questions?