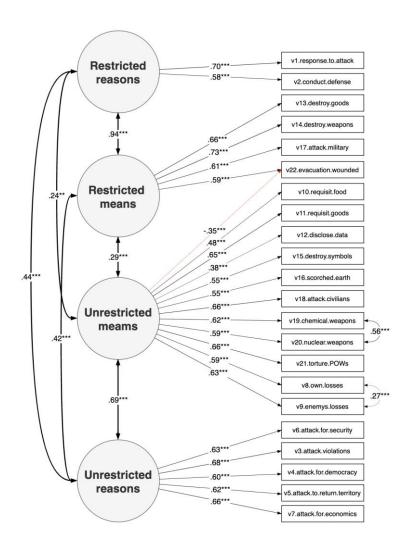
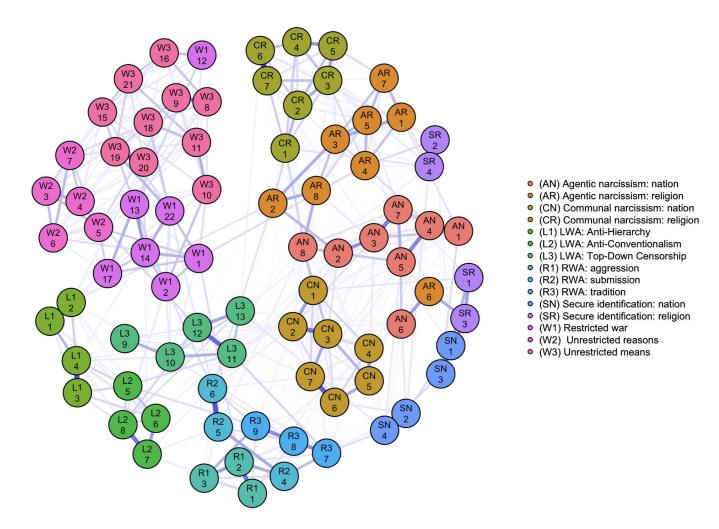
Supplementary Materials 1

Żemojtel-Piotrowska, M. A., Radkiewicz, P., Rudnev, M., Kumove, H. A., & Piotrowski, J. (2025). Collective narcissism, left-wing authoritarianism, right-wing authoritarianism, and justification of war. Politics and Governance, 13, Article 10025. https://doi.org/10.17645/pag.10025



Supplementary Figure S1. Confirmatory factor analysis structure of the theory-implied model.

Standardized parameters



Supplementary Figure S2. Psychometric network model. Based on partial correlations, estimated with the EBIC-glasso algorithm. Blue lines represent positive correlations, red ones represent negative correlations. Brightness and thickness of edges correspond their strength. The width

of the edges reflects their magnitude. Even more fine-grained network analysis shows almost full isolation of justifiability of war items from the pool of the other items. Exceptions are only a few significant at p < .05 links:

- between restricted war item 1 ("response to attack") and AC religion item 4 ("demanding respect for ingroup") and RWA item 2 ("troublemakers should feel unwelcome");
- negative link between restricted war item 2 ("conduct defense") and RWA item 6 ("leaders should guide us");
- unrestricted reasons item 4 (attack for democracy) and LWA item 12 ("terrorism comes from far-right");
- and a link between justification nuclear weapons and LWA item 2 ("expropriation of wealth").

Given the number of possible edges between just war items and the other variables (6951), finding only five significant links underscores independence of just war attitudes and their disconnect from indicators of ingroup-endorsement.

Table S1. Measurement model of beliefs justifying war scale

	Restricted	Unrestricted	Unrestricted
	war	means	reasons
Destruction of enemy transports containing means that	.71***		
could be used to produce weapons	./1		
Attacking another country in response to an attack on	.68***		
its own territory	.00		
Destroying enemy shipments containing industrial	.65***		
goods and luxury goods	.03		
Attacking military objectives on the territory of another	.60***		
country as part of warfare	.00		
Allowing the evacuation of wounded soldiers from	.58***	34***	
combat zones	.50	.5 1	
Waging a defensive war on the territory of one's own	.58***		
country with the participation of the civilian population	.50		
Requisitioning food for military needs	.35***	.38***	
Attacking civilian targets to intimidate the enemy		.67***	
Torture of prisoners to obtain military-useful		.67***	
information		.07	
Requisitioning material goods as spoils of war		.65***	
Use of chemical weapons in warfare		.64***	
Waging war in a situation where one is certain of high		.63***	
civilian casualties		.03****	
Use of nuclear weapons in warfare		.61***	
Waging war in a situation where you are certain of high		.58***	
losses among your own civilian population		.38***	

	Restricted	Unrestricted	Unrestricted
	war	means	reasons
Destroying places and symbols important to the			
opponent (monuments, places of worship, historical		.55***	
monuments)			
Using the so-called scorched earth tactic to make it		.55***	
harder for the opponent to act		.33	
Disclosure of personal data and images of soldiers		.37***	
taken prisoner		.37	
Attacking another country in response to violating the			.68***
rights of its own citizens residing in that country			.08
Attacking another country to secure one's own			.66***
economic or subsistence interests			.00
Attacking another country to guarantee the security of			.63***
your own country			.03
Attacking another country to regain lands lost in			.61***
previous armed conflicts			.01
Attacking another country to introduce fully democratic			.60***
rule there			.00

Note. Model fit CFI/TLI = .927/.917; RMSEA = .050 [.043; .058]; SRMR = .066.

Table S2. Descriptive statistics and correlations among the key variables, with splits for RWA and LWA

Variable	M	SD	Alph a	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Restricted	6.85	2.00	.77															
2. Unrest_reasons	3.80	1.84	.79	.32**														
3. Unrest_means	3.15	1.49	.84	.24**	.57**													
4. ACN_nation	4.13	1.26	.92	01	.09	.01												
5. CCN_nation	4.02	1.43	.96	07	.03	00	.80**											
6. ACN_religion	3.84	1.23	.93	.02	.12*	.04	.69**	.60**										
7. CCN_religion	3.99	1.42	.97	.03	.08	.00	.54**	.63**	.77**									
8. SI_nation	4.21	1.08	.51	.10*	.01	10*	.51**	.46**	.32**	.25**								
9. SI_religion	3.98	1.15	.51	.09	.06	01	.27**	.24**	.45**	.45**	.36**							
10. RWA_AG	4.52	1.27	.83	05	.01	03	.47**	.41**	.35**	.24**	.23**	.10*						
11. RWA_S	4.06	1.37	.82	14**	.06	.05	.55**	.56**	.44**	.36**	.30**	.19**	.63**					
12. RWA_T	4.35	1.24	.85	04	.00	05	.58**	.60**	.45**	.44**	.40**	.20**	.67**	.68**				
13. RWA_total	4.31	1.14	.91	09	.03	01	.61**	.59**	.47**	.39**	.35**	.19**	.87**	.88**	.88**			
14. LWA AH	2.72	1.29	.92	24**	.02	.11*	.18**	.16**	.22**	.17**	.02	.02	.08	.20**	.12**	.15**		
15. LWA_AC	3.24	1.23	.82	20**	.07	.10*	.21**	.16**	.17**	.11*	.09	02	.19**	.24**	.16**	.23**	.71**	
16. LWA_TPC	3.53	1.30	.84	13**	.03	.07	39**	41**	35**	36**	33**	32**	18**	26**	34**	30**	.25**	.28**
17. LWA_total	3.19	0.98	.87	24**	.05	.12*	05	08	02	07	13**	16**	.02	.04	06	00	.80**	.81**
Note. $N = 448$ in all case	$\overline{\text{ses. } M} =$	mean.	SD = st	tandard	deviatio	n.												

ACN = agentic collective narcissism; CCN = communal collective narcissism; SI = secure identification; unrest = unrestricted; RWA = Right-wing authoritarianism; RWA_AG = authoritarian aggression; RWA_S = submission; RWA_T = tradition; LWA = left-wing authoritarianism LWA_AH = anti-hierarchical aggression; LWA_AC = anti-conventionalism; LWA_TPC = top-down censorship

^{*} indicates p < .05. ** indicates p < .01.

Table S3. Path analysis results (standardized coefficients), N = 461

	Outcome variables						
	Restricted	Unrest_means	Unrest_reasons				
Direct effects							
LWA_total	23***	.11*	.05				
RWA_total	09	03	03				
ACN_nation	.11	.03	.12				
ACN_religion	< .01	.08	.10				
CCCN_nation	27**	.05	10				
CCN_religion	.13	07	< .01				
SI_nation	.14*	14*	04				
SI_religion	00	.04	.03				
Indirect effects							
Via LWA							
ACN_nation	01	< .01	< .01				
ACN_religion	03	.02	< .01				
CCN_nation	.02	< .01	< .01				
CCN_religion	.01	< .01	< .01				
SI_nation	.02	< .01	< .01				
SI_religion	.04*	02	< .01				
Via RWA							
ACN_nation	03	01	01				
ACN_religion	01	< .01	< .01				
CCN_nation	03	01	< .01				
CCN_religion	< .01	< .01	< .01				
SI_nation	< .01	< .01	< .01				
SI_religion	< .01	< .01	< .01				
Total, Via both LWA and RWA							
ACN_nation	.08	.03	.12				
ACN_religion	05	.09	.10				
CCN_nation	28**	.03	11				
CCN_religion	.15	08	.01				
SI_nation	.15**	15*	05				
SI_religion	.03	.02	.02				

^{*} *p* < .05, ** *p* < .01, *** *p* < .001

Table S4. Path analysis results (standardized coefficients), excluding participants who did not identify as religious, N = 378

	Outcome variables								
	Restricted	Unrest means	Unrest reasons						
Direct effects		_							
LWA total	27***	.13*	.04						
RWA total	05	02	< .01						
ACN nation	.14	< .01	.14						
ACN religion	10	.05	02						
CCN nation	19*	.03	05						
CCN_religion	.10	< .01	.03						
SI nation	.25***	15*	< .01						
SI religion	12	.01	04						
Indirect effects									
Via LWA									
ACN_nation	< .01	< .01	< .01						
ACN_religion	02	< .01	< .01						
CCN_nation	< .01	< .01	< .01						
CCN_religion	.02	< .01	< .01						
SI_nation	.02	< .01	< .01						
SI_religion	.04*	02	< .01						
Via RWA									
ACN_nation	01	< .01	< .01						
ACN_religion	< .01	< .01	< .01						
CCN_nation	01	< .01	< .01						
CCN_religion	< .01	< .01	< .01						
SI_nation	< .01	< .01	< .01						
SI_religion	< .01	< .01	< .01						
Total, Via both LWA and RWA									
ACN_nation	.13	< .01	.15						
ACN_religion	12	.06	01						
CCN_nation	20*	.03	05						
CCN_religion	.11	< .01	.03						
SI_nation	.27***	16**	< .01						
SI_religion	07	< .01	05						

^{*} *p* < .05, ** *p* < .01, *** *p* < .001

Table S5. Regression analysis results, unstandardized coefficients and Bayes factors

	Restric	Unres	t means		Unrest reasons				
	M1	M2	M3	M4	M5	M6	M7	M8	M9
RWA_total	18			06			07		
_	(1.11)			(2.70)			(2.56)		
LWA total	46***			.19**			.12		
_	(.00)			(.13)			(1.45)		
ACN_nation	.21	.20	.27	.05	.06	.02	.20	.21	.20
	(1.56)	(1.48)	(.73)	(3.05)	(2.53)	(3.05)	(1.30)	(1.01)	(1.16)
ACN religion	07	04	04	.08	.06	.06	.12	.13	.14
	(3.46)	(3.14)	(3.37)	(2.55)	(2.54)	(2.69)	(2.21)	(1.88)	(1.88)
CCN nation	41**	36**	32*	.05	.02	01	13	13	15
_	(.03)	(.09)	(.18)	(2.92)	(2.85)	(3.07)	(1.85)	(1.60)	(1.49)
CCN religion	.18	.17	.13	09	07	04	.00	.02	.04
	(1.27)	(1.29)	(1.89)	(2.18)	(2.23)	(2.77)	(3.26)	(2.74)	(2.85)
SI nation	.29**	.28*	. ,	19*	18*	`	06	05	, ,
_	(.14)	(.17)		(.29)	(.39)		(2.78)	(2.52)	
SI religion	04	02		.05	.03		.04	.04	
_ 2	(3.55)	(3.23)		(2.82)	(2.75)		(3.02)	(2.60)	
RWA AG	, ,	.06	.04		10	08	, ,	11	10
_		(2.82)	(3.28)		(1.57)	(1.96)		(1.72)	(1.87)
RWA S		26*	27*		.15	.16		.12	.12
_		(.21)	(.17)		(.54)	(.45)		(1.43)	(1.44)
RWA T		.03	.08		13	16		09	10
_		(3.18)	(2.82)		(1.27)	(.81)		(2.11)	(2.12)
LWA AH		21*	23*		.09	.11		09	09
_		(.58)	(.41)		(1.61)	(1.38)		(1.90)	(2.10)
LWA AC		13	10		.05	.03		.10	.09
_		(1.90)	(2.51)		(2.44)	(2.86)		(1.95)	(2.17)
LWA TPC		10	13		.03	.04		.12	.12
_		(1.97)	(1.32)		(2.73)	(2.54)		(1.19)	(1.21)
Largest VIF	4.06	4.12	3.96	4.06	4.12	3.96	4.06	4.12	3.96
R^2	.09	.11	.09	.03	.05	.04	.02	.03	.03
Adj. R ²	.08	.08	.07	.02	.02	.02	.00	.00	.01

^{***}p < 0.001; **p < 0.01; *p < 0.05

Note: Bayes factors (BF) are listed in parenthesis, BF compares the model with omitted predictor to the full model, therefore BF > 3 provides support for the null effect, whereas BF < 0.3 provides support for the presence of the effect.

VIF is variance inflation factor.

ACN = agentic collective narcissism; CCN = communal collective narcissism; SI = secure identification; unrest = unrestricted; RWA = Right-wing authoritarianism; RWA_AG = authoritarian aggression; RWA_S = submission; RWA_T = tradition; LWA = left-wing authoritarianism LWA_AH = anti-hierarchical aggression; LWA_AC = anti-conventionalism; LWA_TPC = top-down censorship.