

## **Supplementary Material**

### **Roots of Incivility:**

### **How Personality, Media Use, and Online Experiences Shape Uncivil Participation**

**Table A.** Zero-Order Correlations

		Socio-demographics							
		Dark participation	Age	Male	Low formal education	High formal education	Low income	High income	East Germany
Socio-demographics	Age	-.20**							
	Male	.07**	.28**						
	Low formal education	-.01	.22**	-.02					
	High formal education	-.05*	.04*	.07**	-.51**				
	Low income	-.01	.22**	-.02	1**	-.51**			
	High income	-.04*	.05**	.07**	-.51**	1.00**	-.51**		
	East Germany	-.01	.01	.00	.00	.05**	.00	.05**	
Personality system	Marchiavellism	.33**	-.28**	.09**	-.09**	-.01	-.08**	-.01	-.04*
	Psychopathy	.33**	-.26**	.17**	-.07**	.01	-.07**	.00	-.01
	Narcissism	.24**	-.30**	.03	-.16**	.06**	-.16**	.06**	-.02
	AFD	.08**	.05**	.09**	.08**	-.04	.08**	-.04*	.06**
	CDU	-.02	-.01	.00	-.04*	.05**	-.04*	.05**	.02
	CSU	-.01	.03	.05**	.02	.00	.02	.00	-.04*
	SPD	.02	.07**	.04*	.04*	-.02	.04*	-.02	-.08**
	Green	-.01	-.10**	-.06**	-.11**	.04*	-.11**	.04*	-.04*
	Left	-.01	.08**	.04*	-.03	.02	-.03	.02	.08**
	FDP	-.01	.03	.05*	-.05**	.06**	-.05**	.06**	.00
	Extreme political leaning	.01	.10**	.08**	-.04	.05**	-.03	.05*	.03
	Political anger	.11**	.07**	.03	.12**	-.06**	.12**	-.05**	.03
	Political inefficacy	.01	.13**	.00	.18**	-.11**	.18**	-.11**	.02
	Social environment variables	Internet use per day	-.03	-.06**	.04	-.04*	-.02	-.04*	-.02
Social media use		.12**	-.25**	-.16**	-.02	-.07**	-.02	-.07**	.00
Facebook		.09**	-.12**	-.10**	.04*	-.06**	.04*	-.06**	.01
Odnoklassniki		.14**	-.11**	.01	-.06**	.01	-.06**	.01	-.05**
Twitter		.12**	-.08**	.07**	-.10**	.04*	-.10**	.04*	-.04*
Vkontakte		.17**	-.12**	.01	-.05**	.01	-.05**	.01	-.03
Instagram		.17**	-.36**	-.13**	-.11**	-.01	-.11**	-.01	-.02
Pinterest		.08**	-.21**	-.20**	-.10**	.02	-.10**	.01	.00
Tumblr		.14**	-.17**	.02	-.09**	.02	-.09**	.02	-.04*
Reddit		.16**	-.16**	.07**	-.08**	.02	-.08**	.02	-.03
Xing		.11**	-.07**	.05**	-.18**	.21**	-.18**	.21**	-.05**
Perceived environment	LinkedIn	.11**	-.06**	.07**	-.13**	.15**	-.13**	.15**	-.03
	Civil speech	.15**	-.14**	-.02	-.10**	.03	-.10**	.03	.02
	Offensive speech	.05**	-.05**	.00	-.06**	.03	-.06**	.03	.03
	Hate speech	.28**	-.16**	.06**	-.04*	-.03	-.04*	-.03	-.01
	Victimization	.39**	-.22**	.09**	-.02	-.03	-.02	-.03	-.01

Notes. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

1 **Table A.** Zero-Order Correlations (continued)

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		Personality system							
		Marchia- vellism	Psycho- pathy	Nar- cissism	AFD	CDU	CSU	SPD	Green
Personality system	Marchiavellism								
	Psychopathy	.67**							
	Narcissism	.63**	.50**						
	AFD	.04*	.07**	.01					
	CDU	.04*	.04*	.08**	-.17**				
	CSU	.04*	.05**	.05**	-.07**	-.09**			
	SPD	.00	-.02	-.01	-.16**	-.20**	-.09**		
	Green	.00	-.02	.04*	-.10**	-.12**	-.05**	-.12**	
	Left	-.02	-.05**	-.05**	-.13**	-.16**	-.07**	-.16**	-.10**
FDP	.02	.00	.01	-.10**	-.13**	-.06**	-.12**	-.07**	
Social environment variables	Extreme political leaning	.02	-.03	-.02	.08**	-.15**	-.04*	.04*	.07**
	Political anger	.09**	.09**	.03	.34**	-.34**	-.09**	-.01	-.09**
	Political inefficacy	.00	.02	-.06**	.20**	-.18**	-.02	-.07**	-.13**
	Internet use per day	-.02	-.04*	-.01	.00	-.04*	-.02	-.02	.05*
	Social media use	.00	-.04*	.05**	.00	-.04*	-.03	-.01	.02
	Facebook	.02	.01	.05**	.01	-.03	.01	.00	-.03
	Odnoklassniki	.22**	.23**	.17**	.04*	.03	.01	.00	-.02
	Twitter	.14**	.13**	.12**	.00	.03	-.02	.05**	.03
	Vkontakte	.22**	.23**	.16**	.03	.04*	.00	.01	-.02
Instagram	.18**	.13**	.18**	-.03	.04*	-.04	.02	.04	
Perceived environment	Pinterest	.09**	.04*	.11**	-.03	.01	-.04*	-.01	.06**
	Tumblr	.21**	.21**	.18**	-.01	.02	-.02	.02	.02
	Reddit	.24**	.26**	.17**	.00	.04*	-.03	.03	.00
	Xing	.11**	.10**	.14**	.00	.03	.01	.01	.01
	Linkedin	.16**	.16**	.16**	.01	.02	.00	.03	.00
	Civil speech	.10**	.06**	.09**	.03	.00	.00	-.01	.05**
	Offensive speech	.08**	.03	.05**	.00	-.02	-.02	-.01	.03
	Hate speech	.19**	.16**	.16**	-.01	.04*	.01	.01	.00
	Victimization	.34**	.36**	.22**	.02	-.02	.00	.02	.00

Notes. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

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		Personality system						
		Green	Left	FDP	Extreme political leaning	Political anger	Political inefficacy	
Personality system	Left	-.10**						
	FDP	-.07**	-.10**					
	Extreme political leaning	.07**	.36**	-.08**				
	Political anger	-.09**	.13**	-.04*	.14**			
	Political inefficacy	-.13**	.03	.00	.01	.55**		
Social environment variables	Internet use per day	.05*	.05**	.00	.05*	.00	-.02	
	Social media use	.02	-.02	.05**	-.01	.03	-.01	
	Facebook	-.03	.00	.02	-.03	.03	-.01	
	Odnoklassniki	-.02	-.04*	.03	-.02	.06**	.05*	
	Twitter	.03	.01	.01	.05**	.03	-.04*	
	Vkontakte	-.02	-.02	.01	.00	.05**	.01	
	Instagram	.04	-.06**	.01	.00	-.01	-.05**	
	Pinterest	.06**	-.04*	.00	-.02	.02	-.03	
	Tumblr	.02	.00	-.02	.02	.03	-.05*	
	Reddit	.00	-.03	.01	.02	.02	-.03	
	Xing	.01	-.02	.03	-.01	-.02	-.08**	
	Linkedin	.00	-.02	.04*	-.01	.02	-.06**	
	Civil speech	.05**	.03	-.02	.03	.04*	-.05**	
	Perceived environment	Offensive speech	.03	.05**	.02	.04*	.07**	-.01
		Hate speech	.00	-.02	.00	.02	-.03	-.05**
Victimization		.00	.01	.00	.04*	.09**	-.05**	

Notes. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

8 **Table A.** Zero-Order Correlations (continued)

		Social environment						
		Internet use per day	Social media use	Facebook	Odnoklassniki	Twitter	Vkontakte	Instagram
Social environment	Social media use	.12**						
	Facebook	.05**	.60**					
	Odnoklassniki	-.09**	-.01	.04*				
	Twitter	.09**	.18**	.13**	.20**			
	Vkontakte	-.06**	-.03	.00	.52**	.21**		
	Instagram	.03	.28**	.18**	.15**	.37**	.19**	
	Pinterest	-.02	.16**	.13**	.18**	.15**	.22**	.28**
	Tumblr	.00	.05*	.02	.35**	.30**	.40**	.29**
	Reddit	-.04*	-.01	-.04*	.41**	.25**	.47**	.19**
	Xing	.00	.10**	.06**	.17**	.20**	.22**	.14**
Perceived environment	Linkedin	-.03	.07**	.06**	.28**	.26**	.34**	.18**
	Civil speech	.03	.24**	.18**	.04*	.10**	.06**	.11**
	Offensive speech	.03	.00	.02	.03	.03	.03	.04*
	Hate speech	.00	.09**	.04*	.04*	.12**	.09**	.15**
	Victimization	-.08**	.05*	.07**	.19**	.17**	.22**	.19**

Notes. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

9 **Table A.** Zero-Order Correlations (continued)

		Social environment					Perceived environment		
		Pinterest	Tumblr	Reddit	Xing	Linkedin	Civil speech	Offensive speech	Hate speech
Social environment	Pinterest								
	Tumblr	.32**							
	Reddit	.20**	.50**						
	Xing	.13**	.23**	.24**					
	Linkedin	.19**	.36**	.39**	.53**				
Perceived environment	Civil speech	.07**	.06**	.06**	.09**	.09**			
	Offensive speech	.03	.03	.05**	.05**	.01	.20**		
	Hate speech	.03	.10**	.10**	.06**	.06**	.11**	-.16**	
	Victimization	.09**	.21**	.22**	.12**	.15**	.12**	.17**	.23**

Notes. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

**Table B.** Hierarchical Logistic Regression

			Block 1			Block 2					Block 3							
	<i>B</i>	<i>SE</i>	<i>OR</i>	<i>LL</i>	<i>UL</i>	<i>B</i>	<i>SE</i>	<i>OR</i>	<i>LL</i>	<i>UL</i>	<i>B</i>	<i>SE</i>	<i>OR</i>	<i>LL</i>	<i>UL</i>			
intercept	-0.46	0.06	***	0.63	0.56	0.70	-0.29	0.06	***	0.74	0.66	0.84	-0.39	0.09	***	0.68	0.57	0.81
age	-0.03	0.00	***	0.97	0.96	0.97	-0.02	0.00	***	0.98	0.98	0.99	-0.02	0.00	***	0.98	0.98	0.99
male	0.60	0.08	***	1.81	1.55	2.12	0.29	0.09	***	1.33	1.13	1.58	0.26	0.09	***	1.30	1.09	1.54
machiavellism							0.44	0.06	***	1.56	1.37	1.77	0.43	0.06	***	1.54	1.36	1.76
psychopathy							0.38	0.06	***	1.47	1.31	1.65	0.38	0.06	***	1.47	1.31	1.65
narcissism							0.02	0.05		1.03	0.93	1.13	0.03	0.05		1.03	0.93	1.15
AFD													0.50	0.15	***	1.66	1.25	2.20
CDU													-0.06	0.13		0.94	0.73	1.21
CSU													-0.16	0.22		0.85	0.55	1.30
SPD													0.23	0.13		1.26	0.98	1.62
Green													-0.06	0.17		0.94	0.67	1.32
Left													0.11	0.16		1.11	0.82	1.51
FDP													-0.02	0.17		0.98	0.70	1.37
Nagelkerkes'																		
Pseudo- <i>R</i> <sup>2</sup>				.08						.19						.20		
Deviance				3917.6***						272.8***						22.76**		

Notes. \*\*\* $p < .001$ , \*\* $p \leq .01$ , \* $p < .05$ . OR = Odds Ratio, LL = Lower level of the 95% Confidence interval, UL = Upper level of the 95% confidence interval.

**Table B.** Hierarchical Logistic Regression (Continued)

	Block 4						Block 5						Block 6					
	<i>B</i>	<i>SE</i>	OR	LL	UL	<i>B</i>	<i>SE</i>	OR	LL	UL	<i>B</i>	<i>SE</i>	OR	LL	UL			
intercept	-0.41	0.09	***	0.66	0.55	0.79	-0.64	0.13	***	0.53	0.41	0.68	-2.02	0.23	***	0.13	0.08	0.21
age	-0.02	0.00	***	0.98	0.97	0.99	-0.01	0.00	***	0.99	0.98	0.99	-0.01	0.00	***	0.99	0.99	1.00
male	0.27	0.09	***	1.31	1.10	1.56	0.33	0.09	***	1.39	1.16	1.66	0.17	0.10	***	1.19	0.98	1.44
machiavellism	0.43	0.07	***	1.53	1.35	1.74	0.41	0.07	***	1.51	1.33	1.72	0.30	0.07	***	1.36	1.18	1.56
psychopathy	0.37	0.06	***	1.45	1.30	1.63	0.37	0.06	***	1.45	1.29	1.64	0.29	0.07	***	1.33	1.17	1.52
narcissism	0.03	0.05		1.03	0.93	1.14	0.01	0.05		1.01	0.91	1.13	0.04	0.06		1.04	0.93	1.16
AFD	0.37	0.15	**	1.45	1.08	1.94	0.34	0.15	**	1.41	1.05	1.90	0.41	0.16	***	1.51	1.10	2.07
CDU	0.09	0.13		1.09	0.84	1.42	0.03	0.14		1.03	0.78	1.35	0.03	0.15		1.03	0.77	1.37
CSU	-0.06	0.22		0.94	0.61	1.46	-0.05	0.23		0.95	0.61	1.48	-0.04	0.24		0.96	0.60	1.53
SPD	0.25	0.13		1.29	1.00	1.67	0.20	0.13		1.22	0.94	1.59	0.20	0.14		1.22	0.93	1.61
Green	0.00	0.18		1.00	0.71	1.41	0.03	0.18		1.03	0.72	1.46	0.03	0.19		1.03	0.71	1.50
Left	0.07	0.16		1.07	0.79	1.46	0.10	0.16		1.11	0.81	1.51	0.09	0.17		1.09	0.78	1.52
FDP	0.03	0.17		1.03	0.74	1.44	-0.08	0.17		0.93	0.66	1.30	-0.09	0.18		0.92	0.64	1.32
political extremism	0.02	0.04		1.02	0.95	1.09	0.01	0.04		1.01	0.93	1.08	-0.02	0.04		0.98	0.91	1.06
political anger	0.17	0.05	***	1.19	1.08	1.31	0.15	0.05	***	1.16	1.06	1.28	0.10	0.05		1.11	1.00	1.23
political inefficacy	-0.04	0.05		0.96	0.88	1.05	-0.03	0.05		0.98	0.89	1.07	0.04	0.05		1.04	0.95	1.15
Internet use (hrs/d)							-0.04	0.02	*	0.96	0.93	1.00	-0.02	0.02		0.98	0.95	1.02
Social media use							0.16	0.04	***	1.17	1.08	1.28	0.14	0.05	***	1.15	1.05	1.26
Facebook							0.09	0.11		1.10	0.88	1.37	0.02	0.12		1.02	0.80	1.29
Odnoklassniki							0.22	0.31		1.25	0.69	2.31	0.29	0.34		1.33	0.69	2.62
Twitter							0.05	0.12		1.05	0.84	1.32	-0.09	0.12		0.92	0.72	1.17
Vkontakte							1.35	0.38	***	3.84	1.88	8.58	1.05	0.40	**	2.86	1.34	6.60
Instagram							0.29	0.11	**	1.33	1.07	1.65	0.19	0.12		1.21	0.96	1.52
Pinterest							0.00	0.11		1.00	0.81	1.25	0.04	0.12		1.05	0.83	1.32
Tumblr							0.03	0.22		1.03	0.67	1.60	-0.09	0.24		0.92	0.58	1.46
Reddit							0.50	0.31		1.64	0.91	3.06	0.36	0.33		1.43	0.76	2.76
Xing							0.21	0.13		1.24	0.96	1.59	0.19	0.14		1.21	0.92	1.58
LinkedIn							-0.10	0.18		0.91	0.64	1.28	-0.09	0.19		0.92	0.63	1.32
civic speech													0.46	0.15	***	1.58	1.17	2.14
offensive speech													0.02	0.14		1.02	0.77	1.35
hate speech													1.05	0.12	***	2.84	2.27	3.57
victimization													1.23	0.10	***	3.44	2.80	4.23
Nagelkerkes' Pseudo- <i>R</i> <sup>2</sup>			.20						.24						.34			
Deviance			13.61**						91.22***						295.45***			

Notes. \*\*\**p* < .001, \*\**p* ≤ .01, \**p* < .05. OR = Odds Ratio, LL = Lower level of the 95% Confidence interval, UL = Upper level of the 95% confidence interval.