Supplementary Information

Table A1 | Deviations from Pre-Registration

	Pre-Registration	Deviations
RQ	RQ1: To which degree do users contest algorithms used for personalized content recommendations on social media platforms? RQ2: What are the individual drivers for users' contestation of algorithms used for personalized content recommendations on social media platforms? RQ3: Are there cross-national differences in users' contestation of algorithms used for personalized content recommendations on social media platforms?	We specified RQ1 and RQ3. First, we adopted the terminology used in the DSA ('VLOPs' instead of 'social media platform'). Second, we clarified that we investigate contestation intention instead of contestation behavior. We specified RQ2 by deriving four hypotheses using the same four predictors as in another study in this pre-registered bundle (#109476 - 'Political Consumerism Study'): Perceived risks of social media platforms, Awareness of AI-based content recommendations, Attitudes towards AI-based content recommendations, Privacy concerns
VLOPs	We will ask respondents which type of content recommendations system they prefer in general and for different social media platforms (Facebook, Twitter, Pinterest, Instagram, YouTube, LinkedIn, Tumblr, Reddit, TikTok, Snapchat, WhatsApp, Signal, Telegram, Mastodon, LINE, KakaoStory, BAND, Kwai).	As the instant messaging platform do not employ recommender systems to curate content, we excluded WhatsApp, Signal and Telegram from the analysis
Statistical Analysis	The statistical analysis will be based on regression models. Country-level differences will be assessed using dummy coding and ANCOVA models.	To streamline the statistical analysis, we only used logistic regression models, assessing cross-country differences with dummy coding. We refrained from using additional ANCOVA models.
Filtering	All respondents who answer the attention check item incorrectly will be filtered out. In addition, we will exclude respondents who completed the questionnaire unreasonably fast and slow (+/- 3 SDs).	Due to a translation mistake in the South Korean sample, we could not use the attention check variable to filter out respondents. Instead, we excluded straight liners and applied rigorous cleaning based on the time variable. For that, we asked ten students to fill out the questionnaire as fast as they could while reading all questions. We determined that it was impossible to reasonably complete the questionnaire under 270 seconds. Thus, all respondents completing the questionnaire faster than 270 seconds where excluded from the analysis.

Table A2 | Item wording of all measurements (all items were translated into the native language of the respective country)

Variable (Scale)		Item wording
Algorithmic Contestation Intention		Personalized recommendations based on collaborative filtering That means: You receive personalized content recommendations based on the choices of other users who are similar to you.
		Personalized recommendations based on content filtering That means: You receive personalized content recommendations based on the content you watched or read before.
		Non-personalized recommendations That means: You receive no personalized content recommendations, and the content is presented randomly.
Perceived risks of social media platforms (1= do not agree at all, 5 = fully agree)	…have a negative effect on social relationships.	
	…do not protect users' privacy.	
	…manipulate public opinion on important societal issues.	
	…have a negative effect on users' health.	
	…encourage the spread of misinformation.	
	…are a danger for democracy.	
	…make their users addicted.	
	…make users feel isolated.	
	…have too much control over users' personal data.	
Awareness of AI-based content recommendations (1= not at all aware, 5 = fully aware)	AI is used to recommend content to me on social media platforms.	
	AI is used to prioritize certain content on social media platforms above others.	
	AI is used to tailor certain content to me on social media platforms.	
	AI is used to show someone else different content than I get to see on social media platforms.	
	AI is used to show me content on social media platforms based on automated decisions.	
	AI does not require human judgments in deciding which content to show me on social media platforms.	
	AI makes automated decisions on what content I get to see on social media platforms.	
	The content that AI recommends to me on social media platforms depends on my online behavior on that platform.	
	The content that AI recommends to me on social media platforms depends on my online behavioral data.	
	The content that AI recommends to me on social media platforms depends on the data that I make available online.	
	It is not always transparent why AI decides to show me certain content on social media platforms.	
	The content that AI recommends to me on social media platforms can be subjected to human biases such as prejudices and stereotypes.	
	AI uses my personal data to recommend certain content on social media platforms, and this has consequences for my online privacy.	

Attitudes towards AI-based content recommendations (1= do not agree at all, 5 = fully agree)	I like it when social media platforms show me content adjusted to my interests and online behavior by AI.
	Automatic recommendations by AI are a good way to find content on social media platforms I would not have found otherwise.
	Automatic recommendations by AI are a good way to follow what goes on in society.
Privacy concerns (1= do not agree at all, 5 = fully agree)	I'm afraid social media platforms disclose private information about me.
	Social media platforms invade my privacy.

Table A3 | Results of the logistic regression

Variable	B	SE	95% CI for Odds Ratio		
			Lower	Odds Ratio	Upper
Germany	0.92***	0.15	1.89	2.51	3.34
Japan	0.25	0.16	0.94	1.28	1.73
South Korea	0.15	0.15	0.87	1.16	1.56
UK	0.36*	0.14	1.08	1.43	1.90
USA	0.31*	0.15	1.02	1.36	1.81
Perceived Social Media Risks	0.05	0.06	0.94	1.05	1.17
Attitudes towards RS on VLOPs	-0.86***	0.05	0.39	0.42	0.47
Awareness of RS on VLOPs	0.14**	0.05	1.05	1.15	1.26
Privacy Concerns	0.18***	0.05	1.09	1.20	1.32
Social Media Trust	-0.19***	0.05	0.76	0.83	0.91
Political Interest	0.05	0.04	0.98	1.05	1.13
Political Partisanship	-0.03	0.02	0.94	0.97	1.00
Age	0.02***	0.00	1.01	1.02	1.02
Gender	-0.10	0.08	0.78	0.91	1.07
Education	0.02	0.05	0.93	1.02	1.12
Constant	-0.64	0.40	0.24	0.53	1.16
Observations			4512		
Nagelkerke R^2			0.31		

*Model χ^2 (15)=1125.79, p<.01; *** p<.001, ** p<.01, * p<.05*

Table A4 | Results of the logistic regression including all respondents (without filtering for straight liners or time)

Variable	B	SE	95% CI for Odds Ratio		
			Lower	Odds Ratio	Upper
Germany	0.92***	0.15	1.89	2.51	3.35
Japan	0.29	0.15	0.99	1.33	1.80
South Korea	0.16	0.15	0.88	1.18	1.58
UK	0.37*	0.14	1.09	1.44	1.91
USA	0.31*	0.14	1.03	1.37	1.82
Perceived Social Media Risks	0.05	0.05	0.94	1.05	1.17
Attitudes towards RS on VLOPs	-0.86***	0.05	0.39	0.43	0.47
Awareness of RS on VLOPs	0.15**	0.05	1.06	1.16	1.27
Privacy Concerns	0.19***	0.05	1.10	1.21	1.32
Social Media Trust	-0.19***	0.05	0.76	0.83	0.91
Political Interest	0.05	0.04	0.98	1.05	1.12
Political Partisanship	-0.03	0.02	0.94	0.97	1.00
Age	0.02***	0.00	1.01	1.02	1.02
Gender	-0.11	0.08	0.77	0.90	1.05
Education	0.02	0.05	0.93	1.02	1.11
Constant	-0.68	0.40	0.23	0.51	1.11
Observations			4563		
Nagelkerke R^2			0.31		

*Model χ^2 (15)=1117.44, p<.01; *** p<.001, ** p<.01, * p<.05*