

Still Watching, Less Persuaded: Attention to News Reduces Authoritarian Propaganda Effectiveness*

Anton Shirikov[†] Georgiy Syunyaev[‡]

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State propaganda in autocracies often creates information bubbles, leaving citizens unwilling or unable to switch to alternative sources. This study shows that propaganda's sway can be decreased even without escaping such bubbles. In a panel experiment with 1,176 Russian citizens, we randomly assigned participants to analyze the reporting patterns of (i) propagandistic state-owned TV content only or (ii) both state-owned and balanced non-governmental TV content over four weeks. Two weeks after the intervention, both treatments reduced support for the authoritarian regime but did not undermine trust in or exposure to state media. Exploiting the differences in news channel composition across treatments, we find support for two mechanisms explaining these effects: increased attention to familiar media content and increased consumption of news from non-government sources. Subgroup analyses show that these mechanisms operate primarily among citizens who already exhibit skepticism toward the regime and propaganda.

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[†]University of Kansas; e-mail: shirikov@ku.edu

[‡]Vanderbilt University; e-mail: g.syunyaev@vanderbilt.edu.

Research on autocracies has shown that authoritarian propaganda wields significant influence over domestic audiences, often more than scholars and practitioners anticipated. Traditionally, increasing the supply of independent, critical information has been seen as the most effective strategy to counter state messaging, often described as an “antidote against tyranny” (Muratov, 2021). However, while outside information sometimes fosters distrust in official messaging and contributes to the collapse of authoritarian rule (McMillan and Zoido, 2004; Stein, 2013), in many autocratic regimes, the consumption of state media content remains high for decades (Meyen and Schwer, 2007; Zhu, 2010; Levada Center, 2023) despite the availability of alternative sources. Providing access to independent news often fails to reshape news consumption and preferences (Chen and Yang, 2019) or alter existing evaluations of incumbents (Syunyaev, 2021). In some cases, such alternative media even increase satisfaction with autocratic governments (Kern and Hainmueller, 2009; Huang and Yeh, 2017). How, then, can the influence of state-controlled media be reduced?

Despite extensive research on authoritarian information manipulation, we still lack understanding of when citizens disengage from state-controlled media or turn to alternative information sources (Rosenfeld and Wallace, 2024). While interest in independent news may increase during crises (Chang et al., 2022; Simonov and Rao, 2022; Pop-Eleches et al., 2024), little is known about the factors that reduce the influence of propaganda in the absence of major shocks. A handful of studies (Huang, 2021; Porter et al., 2024) have sought to correct misperceptions disseminated by autocratic governments, but this work does not consider whether corrections change perceptions of and interest in state media outlets.

This study examines three mechanisms by which citizens may escape the state propaganda bubbles. First, and most commonly discussed in prior research, individuals can *recognize the pro-regime bias of state media*, prompting them to seek alternative sources and reassess official narratives. Second, exposure to independent outlets can *diversify news consumption*, improving awareness of alternatives and encouraging a more critical stance toward

government messaging through comparisons. Third, and underexplored in prior work, simply encouraging citizens to pay closer attention to political reporting patterns—even without changing their media preferences—can *foster more skeptical and critical processing of propaganda*, ultimately reducing regime support.

Our analysis explores these mechanisms via a six-week online panel experiment conducted in 2023 with 1,176 Russian adults. The stringent control over media and new crackdowns on dissent, initiated by the Kremlin after Russia’s 2022 full-scale invasion of Ukraine, presents a unique opportunity to investigate our theoretical propositions. Examining whether the impact of propaganda narratives can be lessened in such circumstances enables us to better understand the resilience of authoritarian regimes and the threats to their rule.

In the experiment, participants completed brief content analysis tasks across multiple survey waves, examining the features of state versus independent news coverage. By counting positive and negative references to Russia, its government and other countries, they were prompted to observe editorial differences between Rossiya, the main state television channel, and RTVI, a more editorially balanced and non-government channel. The placebo control group analyzed non-political segments from TV channel Kultura, which served as a baseline for experimental comparisons. Our intervention, following the paradigm of experiential learning ([Morris, 2020](#)), offers a more practical alternative to traditional media literacy exercises; study participants discovered the patterns of biased or balanced coverage via short independently completed tasks rather than relying on external guidance or extensive literacy training. This approach is particularly relevant in autocracies, where citizens may be skeptical of outside assessments of media bias.

Our study demonstrates that a better understanding of political reporting patterns can increase the audience for independent media and skepticism about propaganda even without changing the consumption of or beliefs about pro-government media.

First, both treatments resulted in more critical evaluations of the Russian government and greater concern over the war in Ukraine. One likely channel for this reassessment was respondents' interest in more balanced reporting. Participants in the treatment groups recognized stronger pro-government patterns in state media coverage while acknowledging a more neutral nature of the reporting by the independent outlet. Exposure to RTVI's balanced coverage increased its consumption and awareness of its political content. These changes in awareness and news preferences persisted for at least two weeks, indicating durable effects.

At the same time, we observed more critical political beliefs even among participants who analyzed state television coverage in isolation, without comparing it to independent news. This finding suggests that detailed analysis of propaganda encourages more skeptical processing of political information.

Perhaps most surprisingly, despite increased skepticism about state media news and political belief updating, our intervention failed to improve the recognition of bias or reduce the consumption of state media. Moreover, awareness of propaganda themes covered by state media even increased. This pattern is likely explained by habitual preference for state television and its alignment with respondents' political views. Notably, shifts in political attitudes and increased independent media consumption happened primarily among citizens who were already skeptical of the regime, those more open to scrutinizing propaganda.

These findings make important contributions to research on propaganda and biased media consumption.

First, our experiment highlights a crucial pathway to reducing the persuasive power of authoritarian propaganda. Research on autocratic countries has often suggested that citizens can see through propaganda messaging and process it critically (see, e.g.,

[Mickiewicz, 2008](#); [Huang, 2015](#); [Huang and Yeh, 2017](#)), but social scientists still poorly understand how individuals may acquire such awareness and whether it undermines the consumption of state media and pro-regime attitudes. We demonstrate that the sway of propaganda can be weakened via improving media literacy and the quality of news processing. Yet, in contrast to some existing work ([Gehlbach and Sonin, 2014](#)), we document that skepticism about official narratives can emerge without breaking the habit of consuming propaganda. These findings clarify our understanding of citizen agency and conformity under autocracy.

Second, our study sheds light on the microfoundations of consumers' choices between propaganda and independent news ([Paskhalis et al., 2022](#)), emphasizing the role of attentive news processing. While state censorship makes it more difficult for citizens to encounter and follow alternative news sources, interventions like ours can partially offset the impact of censorship and facilitate the dissemination of independent information ([Hobbs and Roberts, 2018](#); [Chen and Yang, 2019](#)). Moreover, this study provides evidence of the link between media distrust and pro-regime attitudes ([Rosenfeld, 2018](#); [Gläsel and Paula, 2020](#)), clarifying that thoughtful engagement with news content can reduce government support even without changes in exposure to propaganda.

At the same time, we confirm earlier findings that state media consumption is the norm for most people ([Shirikov, 2024a](#); [Blum, 2024](#)), with many citizens developing a certain immunity to critical information ([Robertson, 2015](#)). Our results emphasize that the preference for propaganda is resistant to awareness of the pro-government nature of state outlets.

Finally, our analysis contributes to recent work on cross-cutting media consumption ([Broockman and Kalla, 2024](#); [Enikolopov et al., 2022](#); [Green et al., 2024](#)) and demand for unbiased news ([Chopra et al., 2024](#)). We show how interventions promoting diverse and higher-quality news sources can be designed without requiring extensive media

exposure. This paper is also related to research on correcting misperceptions (see e.g., [Guess et al., 2020](#); [Badrinathan, 2021](#); [Blair et al., 2024](#); [Huang, 2021](#)). While we do not examine false beliefs directly, our treatments increased citizens’ news awareness, which may enhance their resistance to disinformation. Key features of our experiment, including the encouragement to learn about media bias, may prove useful in developing interventions to correct misperceptions and improve news literacy.

1 How Can Citizens Puncture the Propaganda Bubble?

Authoritarian governments routinely direct state-controlled media to distort and withhold information; so why do citizens consume such manipulative propaganda? The simplest explanation is the lack of choice: government-controlled outlets dominate the news industry, and alternative sources are blocked or made inconvenient to access ([Shadmehr and Bernhardt, 2015](#); [King et al., 2013](#); [Roberts, 2018](#)). However, recent work emphasizes that the consumption of propaganda outlets is often driven by individuals’ habitual preferences, which stem from ease of access and convenience, political like-mindedness ([Shirikov, 2024b](#)), or taste and brand loyalty ([Simonov and Rao, 2022](#); [Blum, 2024](#)). Citizens may tolerate or overlook political bias when content is appealing ([Gentzkow et al., 2015](#); [Feldman, 2011](#)). Moreover, autocrats mask their political agenda by blending propaganda with truthful reporting ([Gehlbach and Sonin, 2014](#); [Rozenas and Stukal, 2019](#); [Carter and Carter, 2023](#)). A combination of these factors may explain, for example, the popularity of state television in Russia ([Levada Center, 2023](#)).

Still, only a handful of studies have examined how the consumption of non-propaganda content in autocracies can be promoted, and their findings are mixed. [Chen and Yang \(2019\)](#) offered Chinese citizens unrestricted access to foreign news sources blocked in the country, finding little overall demand for independent information. Yet, participants who were incentivized to read foreign media carefully (through knowledge quizzes

and monetary rewards) became more interested in alternative sources, skeptical about domestic propaganda, and critical about the Chinese regime. In Russia, [Enikolopov et al. \(2022\)](#) found that exposure to an independent outlet can promote oppositional views and electoral behavior, but such content invokes backlash among pro-regime citizens. Research in Tanzania ([Rahmani, n.d.](#); [Green et al., 2024](#)) documented substantial interest in independent news outlets but little impact of exposure to such media on political attitudes. However, with the exception of [Chen and Yang \(2019\)](#), these studies did not measure whether exposure to alternative sources reduces the attractiveness and credibility of state media.

Beyond authoritarian contexts, research has explored efforts to shift news consumers away from politically biased sources, often concluding that educating citizens about media bias is challenging. For instance, [Broockman and Kalla \(2024\)](#) found that while substantial exposure to politically opposing news can prompt belief updates, consumers typically revert to their usual news diets once the intervention ends. Similarly, [Hopkins and Gorton \(2024\)](#)’s encouragement of the consumption of higher-quality local news sources was hindered by partisanship. [Chopra et al. \(2024\)](#) showed that explicit warnings about ideological bias in news outlets reduced demand for biased media, but only when the purported bias contradicted consumers’ preexisting beliefs.

This study investigates factors that encourage the consumption of independent media and foster critical views of autocratic governments. Building on previous work, particularly the studies by [Chen and Yang \(2019\)](#) on careful news consumption and [Chopra et al. \(2024\)](#) on political bias guidance, we emphasize the role of *attention to political reporting patterns*—the editorial approaches to coverage of political developments.¹ In these reporting patterns,

¹To capture the distinctiveness of political reporting, scholars often use terms such as media bias and media slant ([Gentzkow and Shapiro, 2010](#)). The term “reporting patterns” that we use is more general and applicable to any media outlet’s coverage regardless of the presence of political bias; learning about reporting patterns leads to an improved understanding of what is covered by an outlet without necessarily changing the perceptions of its bias.

state and independent news organizations differ sharply. State media often exhibit a pro-government bias, which manifests in direct praise, favorable comparisons with other countries, and selective topic coverage that supports the regime's narrative while underreporting stories incompatible with official messaging. In contrast, independent media provide more balanced reporting, scrutinize the regime rigorously, and offer a critical perspective on government performance.

One pathway to escaping the state media bubble noted in existing work involves *recognizing the pro-regime bias of state media*. This recognition can lead individuals to reduce their consumption of propaganda and seek alternative news sources. Reporting biases may be challenging to discern during habitual consumption of familiar media, but attentive information processing can expose distortions in news messaging (LaRose, 2010; Flaxman et al., 2016; Pennycook and Rand, 2019). Consequently, reevaluating media bias and one's news diet can decrease government support, either by reducing exposure to pro-regime messaging or through critical reassessment of previously disseminated propaganda narratives. In addition, propaganda bias should become more explicit when citizens have an opportunity to compare the reporting patterns of state and independent media (Chen and Yang, 2019; Enikolopov et al., 2022).

Another mechanism that can reduce propaganda's influence is *diversification of news consumption*. News consumers often recognize the value of learning from different media sources and comparing their reporting to better understand news developments. However, authoritarian governments make independent media less visible and convenient to use, shifting attention to state-controlled outlets. Consequently, citizens are often unaware of many independent outlets or fail to use them regularly. Exposure to independent reporting highlights the availability of alternatives, increasing interest in their consumption and encouraging a more critical treatment of government actions and propaganda narratives. Further, the distinctiveness and value of alternative sources become more evident when

citizens consider them attentively, observing their political reporting patterns. Such beneficial effects may occur even if news consumers are politically or otherwise attached to propaganda outlets. Diversification of media consumption is about the novelty of alternatives and curiosity, not the complete rejection of propaganda.

Finally, awareness of political reporting patterns might lead individuals to *process news information more cautiously* and derive more critical insights without updating perceptions of propaganda bias or news consumption. Often, the bias of state outlets is well-known (Mickiewicz, 2008; Truex, 2016), and its recognition may already be built into citizens' media choices, whereby individuals consume state media *despite* the bias for political, informational, or taste-based reasons. In such cases, attention to reporting patterns is unlikely to shift entrenched media preferences but may still influence what citizens learn from propaganda coverage, increasing resistance to official narratives and ultimately prompting more negative government assessments. In other words, this mechanism is about evaluating any news content rather than specific media outlets.

Figure 1 summarizes the three mechanisms we described. Importantly, citizens are more likely to disengage from state media through one of these mechanisms above when they *independently* evaluate news sources, relying on personal experiences and reasoning rather than external guidance. Research highlights the benefits of learning through concrete experiences and reflective observation (Kolb, 1984; Morris, 2020), which increase the effectiveness of media literacy (Hobbs and Frost, 2003) and fact-checking (Oeldorf-Hirsch et al., 2020; Bradshaw et al., 2024). Self-reliant learning is crucial for expanding media diets, especially when encountering unfamiliar or discordant political content. Citizens may distrust researcher-provided labels as politically motivated (Chopra et al., 2022), and in autocracies, where governments discourage alternative media, such guidance may be viewed with suspicion. Allowing individuals to draw their own conclusions helps avoid these issues.

In the empirical analysis below, we examine the three scenarios of piercing the propaganda bubble outlined above.² The common expectation across these scenarios is that *attention to media reporting patterns leads to more critical evaluations of authoritarian regimes and their performance*. Further, *comparing political reporting patterns of state and independent media increases independent news consumption*. Once we test these primary propositions, we explore whether the changes in news consumption and evaluations of the government result from the revealed state media bias, interest in alternative news sources, or learning to evaluate news content more carefully. To understand these mechanisms, we examine a range of outcomes, including perceptions of state and independent media outlets and awareness of political developments covered by these outlets.

Finally, the arguments above assume that citizens inherently value more neutral and objective reporting. However, pro-regime citizens may appreciate the biased coverage of state media because of political alignment with its narratives, being undeterred by propaganda’s lack of neutrality or independence (Shirikov, 2024a). Therefore, we explore whether opposition-minded individuals are more likely to act on evidence of biased reporting by moving away from propaganda and adopting more critical views.

2 State and Independent Media in a Wartime Autocracy

We test our theory in Russia under Vladimir Putin’s rule—an authoritarian regime that relies on media manipulation as a key instrument of managing public opinion and sustaining legitimacy (Gehlbach et al., 2023). Kremlin-controlled news outlets promote the regime’s purported policy achievements, emphasize anti-Western and conservative ideas (Sharafutdinova, 2020), and attribute problems to foreign adversaries (Rozenas and Stukal,

²The first theoretical explanation (*recognizing the pro-regime bias of state-owned media*) was registered in the pre-analysis plan at osf.io/d7w8q. Two other explanations were derived post hoc to provide possible explanations for deviations from our original expectations. See Appendix A.2 for further discussion of deviations from the pre-analysis plan.

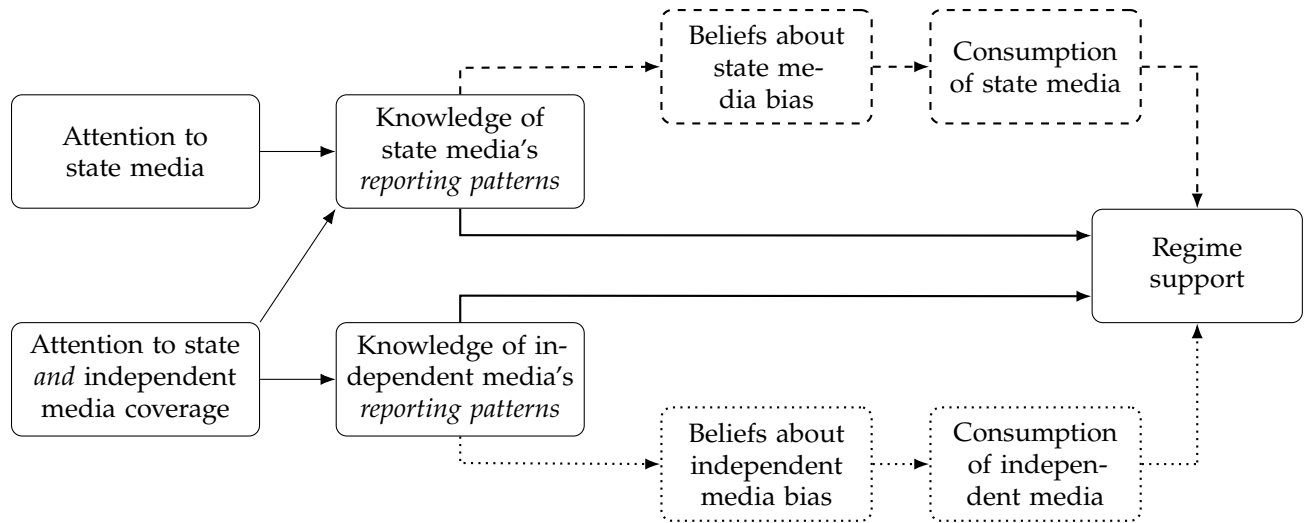


Figure 1: Theoretical argument.

Note: A diagram of the causal relationship between evaluations of news sentiment in state and independent media and the outcomes of interest. Dashed borders and arrows denote the first mechanism (reevaluating state media bias); dotted borders and arrows denote the second mechanism (interest in independent sources); and solid arrows denote the third mechanism (attentive and careful news processing).

2019; Syunyaev, 2022). During Russia’s war on Ukraine, state media transformed into a machine of military propaganda that portrays Russian soldiers as heroes and liberators, the Ukrainian authorities as Nazis, and NATO’s “aggression” as the reason for the conflict. Despite the heavy pro-regime bias, most Russians consume news from pro-government outlets and trust them more than critical news sources (Shirikov, 2024a).

To understand the reporting patterns of Russian state media and their more independent counterparts, consider two television stations: state-owned Rossiya-1 and private RTVI. Rossiya-1 is Russia’s leading television station,³ and its news broadcasts closely reflect the Kremlin’s informal guidance (Gessen, 2022). RTVI is a private international media outlet, owned by an Armenian-American entrepreneur Mikayel Israyelyan since 2019 (Ivanova, 2019), that produces news for consumers in Russia and Russian-speaking audiences abroad. RTVI offers relatively balanced political coverage compared to both pro-government and opposition media, which likely explains why it was permitted to operate in Russia even

³In 2023, Rossiya-1’s audience share was 14.5%, compared to 9.7% for NTV and 7.4% for Channel One, two other popular stations (Tumanov et al., 2023).

after the Kremlin banned most independent media in 2022 ([Gessen, 2023](#)).

The pro-government line of Rossiya-1 and the more neutral approach of RTVI become apparent from their topic selection. For example, on August 4, 2023, the opening segment in RTVI's evening news broadcast discussed the harsh prison sentence for the Russian opposition leader Alexey Navalny and reported a Ukrainian drone attack that severely damaged a Russian warship. On August 18, 2023, RTVI reported on drone attacks in the center of Moscow, saying that the Russian capital was "again in the zone of increased risk." For state media like Rossiya-1, covering the opposition or Russian military failures was strongly forbidden (see, e.g., [Proekt Media, 2024](#)). Instead, on both dates, Rossiya-1's broadcasts focused on Ukraine's alleged military losses and the Russian army's advances.

State and independent media also strongly diverge in their framing of political events. RTVI aimed to cover the Russo-Ukrainian war in a balanced way and acknowledged Ukraine's perspective as valid. For example, the station admitted the harm to Ukrainian civilians caused by the Russian army (saying, e.g., "Kyiv survived a missile attack") and used Ukrainian names such as Bakhmut for cities that Russia had occupied and renamed. Rossiya-1, on the other hand, framed attacks on Ukrainian cities as "high-precision strikes" against military objects and extolled Russian weapons as "powerful and formidable." In another example, RTVI covered the criminal cases against the former U.S. president Donald Trump, describing Trump and President Joe Biden in neutral terms, whereas Rossiya-1 claimed that Biden instigated Trump's prosecution in an attempt to avoid prison for himself.

These examples demonstrate that the political sentiment of state and more independent media is markedly different. Not all of these reporting patterns are immediately apparent to casual news consumers. However, attentive news processing should illuminate these aspects of news coverage, particularly when comparing state media to more balanced alternatives.

3 Research Design

3.1 Study Sample

To test the hypothesized effects and the implications of the mechanisms above, we conducted an online panel experiment with four survey waves. The study timeline is shown in Figure 2. Participants were adult residents of Russia recruited through the online survey company TGM Research.⁴ 2,037 respondents completed the baseline survey, and 1,176 completed the endline survey. The latter group is our main sample.

Most participants consumed state-owned media. In particular, 67% reported regularly learning news from Rossiya-1 and 77% percent from TV more generally in the baseline survey. The average participant relied on about four state news sources but fewer than one independent outlet. Importantly, only 3% indicated using the independent TV station RTVI, which suggests that most participants did not have preconceptions about its reporting patterns. Other sociodemographic details of the sample are in Table A1. Additional details on sample enrollment can be found in Appendix A.

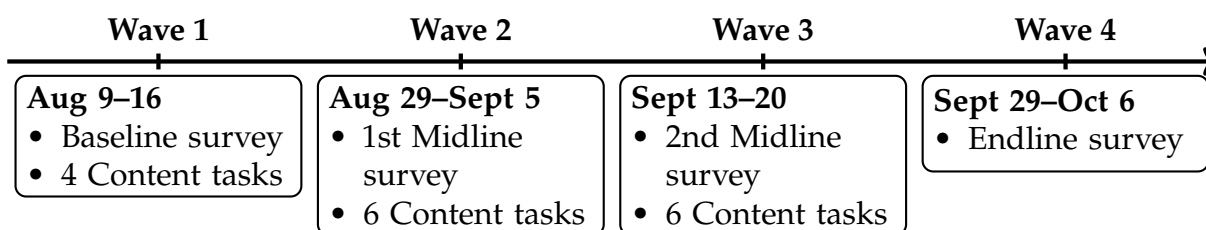


Figure 2: Study Timeline (August 9–October 6, 2023).

3.2 Intervention

We study the effects of evaluating pro-government media coverage and comparing it with independent media coverage via a novel content analysis intervention designed, among other things, to minimize potential experimenter demand effects. The intervention was

⁴See Section A.1 for a discussion of how we addressed potential ethical concerns related to surveys in autocracies at war.

implemented at the end of survey waves 1, 2, and 3 in the form of content analysis tasks, whereby participants were asked to watch four to six TV headline news segments and answer a few short factual questions about these segments.

The main component of the intervention were the news headline segments—short summaries of daily developments commonly shown at the beginning of TV news broadcasts. Such headlines capture the essence and key narratives of each broadcast, allowing us to highlight outlet reporting patterns without artificially editing news broadcasts. After each headline, participants were asked several questions about its political sentiment: how often the segment mentioned Russian government officials, the situation in Russia, and foreign countries *positively* and *negatively*. These questions were designed to sharpen participants' attention to editorial patterns. Importantly, this intervention is compound and may also have improved participants' news literacy skills and their attentiveness to news content in general.

All participants had to complete the content analysis tasks described above, but we varied the composition of the headline segments across three experimental conditions to study the effects of pro-government and independent media coverage evaluation. Participants were assigned to one of these three conditions at the end of the baseline survey using simple random assignment with equal probabilities. This assignment was maintained across the subsequent waves.

In the ***Rossiya+Kultura* condition** (pro-government media), participants analyzed news segments from Rossiya-1, a widely used state-owned TV station, and Kultura, a TV channel covering arts and culture, which served as a benchmark of non-political coverage. In the ***Rossiya+RTVI* condition** (pro-government vs. independent media), participants analyzed state-owned Rossiya-1 and the non-government RTVI, which offers more balanced coverage and was largely unfamiliar to participants. The ***Kultura* condition** (placebo control) exposed participants only to non-political Kultura segments, ensuring that the

estimated effects are not driven simply by exposure to content analysis tasks.⁵

To facilitate comparisons, we pre-selected and ordered videos to be similar except for news topics and framing.⁶ All headlines were taken from evening prime-time news broadcasts. In the two treatment conditions, participants first viewed Rossiya-1 headlines, then either Kultura or RTVI headlines from the same date. Each participant evaluated two such pairs of headlines in the baseline survey and three pairs in the second and third survey waves. Besides questions about the political sentiment of news headlines, participants also indicated the source of each video and assessed its overall quality.

3.3 Measurement

In the analysis below, we examine the effects of the intervention on the outcomes measured in the endline survey (wave 4), which did not include experimental tasks and was conducted at least two weeks after the last survey with content analysis tasks. The endline outcomes correspond to the factors and mechanisms outlined in our theoretical argument (see Figure 1).

We measured *regime support* using three indices that averaged over (a) approval of the president, the national government, the regional governor, and the United Russia party; (b) satisfaction with various public services; and (c) concerns about the war in Ukraine.

Next, *news consumption and news awareness* were measured using the indicators of self-reported consumption of Rossiya-1 and RTVI in the preceding week, as well as the indices capturing the consumption of other state or independent outlets. In addition, we assessed the participants' preference for either Rossiya-1 or RTVI by asking which of these two channels they would prefer for an additional content analysis task.⁷ We also assessed

⁵See Appendix C.1 for changes in control group results across study waves and further discussion.

⁶See Appendix A.6 for discussion and video transcripts.

⁷In the additional task, respondents were asked to evaluate the quality of a short non-political video about natural disasters in Europe by either Rossiya-1 or RTVI.

awareness of recent news headlines from both state and independent media.

To assess the knowledge of *political reporting patterns*, we asked participants how likely Rossiya-1 and RTVI were to cover domestic news positively and foreign news negatively—the features of news coverage directly assessed by participants through content analysis tasks. In addition, to examine participants’ ability to correctly attribute headlines to each outlet, we included a *quiz* in which they were asked to match six additional news headlines (not previously shown in the intervention) to either Rossiya-1 or RTVI. The answers to the quiz questions were combined into a measure of share of correctly attributed headlines.

Finally, to measure changes in the *perceptions of media bias*, we asked whether the participants viewed Rossiya-1 and RTVI as (a) unbiased and (b) free from government influence. Answers to these questions were combined into overall indices of unbiasedness and independence, one for each outlet.

Table 1 provides a summary of our outcome measures. Further details on measurement and exact question wording can be found in Appendix A.4.

Table 1: Main outcomes measurement

Variable Name	Scale	Description
Regime support		
Authorities approval	z-score	Standardized average of approval of president, government, governor, United Russia (rescaled from 1–5 Likert using control mean and std. dev.)
Quality of public services	z-score	Standardized average evaluation of six services (rescaled from 1–7 Likert using control mean and std. dev.)
Ukraine concerns	z-score	Standardized average of five items: attention, concern, and expectations about Ukraine war (rescaled from multiple scales using control mean and std. dev.)
News consumption and awareness		
Consumed last week (Rossiya-1/RTVI)	0/1	1 if watched the outlet in preceding week (self-reported)
Prefer Rossiya-1 over RTVI	0/1	1 if preferred Rossiya-1 over RTVI for the extra task
News awareness (pro-government/critical)	0-1	Share of six pro-government (critical) headlines recognized
Knowledge of reporting patterns and media bias		
News quiz (correctly identified)	0–1	Share of six headlines correctly matched to either Rossiya-1 or RTVI outlet
Covers foreign news negatively (Rossiya-1/RTVI)	0–1	Likelihood of covering foreign countries negatively (rescaled from 1–4 Likert)
Covers domestic news positively (Rossiya-1/RTVI)	0–1	Likelihood of covering Russia positively (rescaled from 1–4 Likert)
Perceived media bias (Rossiya-1/RTVI)	0–1	Average of unbiasedness (1–4 Likert) and independence (1–3 Likert) items (higher = more bias perceived)

3.4 Estimation

We estimate the intent-to-treat (ITT) effects of the two main treatment conditions using a simple OLS estimator.⁸

Let \mathbf{Y} be the vector of observed outcomes. Let \mathbf{Z}_S denote the vector indicating subjects who analyzed pro-government media coverage (the *Rossiya+Kultura* condition), and \mathbf{Z}_I denote the vector indicating subjects who analyzed independent media coverage in addition to state media coverage (the *Rossiya+RTVI* condition). We estimate the following regression model:

⁸Note that we do so despite high levels of attrition (42%) as we did not find evidence that the missingness-at-random assumption was violated. See Appendix C.2 for an investigation of attrition patterns.

$$Y = \alpha + \tau_S Z_S + \tau_I Z_I + \varepsilon, \quad (1)$$

where τ_S is the estimate of the ITT effect of content analysis of (S)tate media in the *Rossiia+Kultura* condition compared to the control condition, while τ_I is a similar estimate of the ITT effect of evaluating both (I)ndependent and state media (*Rossiia+RTVI* condition) compared to the control condition. α estimates the control group mean that we report in regression tables in the Appendix B.1.

p -values are computed using parametric *HC2* standard errors implemented in the `estimatr` package in R. Uncertainty estimates (standard errors, confidence intervals and p -values) are calculated using two-sided tests.⁹

To examine mechanisms, we estimate conditional ITT effects by a moderator R and the difference between them using the following OLS regression model:

$$Y = \alpha + \nu R + \sum_{k \in \{S, I\}} \tau_k Z_k + \sum_{k \in \{S, I\}} \pi_k Z_k \times R + \varepsilon, \quad (2)$$

where τ_k is the ITT effect for treatment k when $R = 0$, ν is the effect of the moderator R in the control group, and π_k captures how the ITT effects of respective treatment condition change as R increases. For subgroup representations in the figures, we estimate conditional effects by running Equation 1 separately for subgroups defined by R .

⁹This deviates from the pre-analysis plan where we registered one-sided tests following the *recognizing the pro-regime bias of state media* logic described in Section 1. See Appendix A.2 for further details on deviations from the pre-analysis plan.

4 Results

This section presents the main empirical results of our experiment. We first report the intervention’s effects on our primary substantive outcomes: **media consumption** and **political attitudes**. We then investigate the causal pathways, assessing the evidence for the three mechanisms proposed earlier, and explore how the main effects are moderated by pre-existing political loyalties.

4.1 Media Consumption and Political Attitudes

We begin by examining the intervention’s impact on participants’ media consumption habits. As shown in Figure 3, participants who analyzed both pro-government and independent broadcasts were 12 percentage points (p.p.) more likely to report having watched the independent outlet RTVI or visited its website in the week prior to the endline survey. Therefore, jointly analyzing independent media and propaganda more than doubled the probability of consuming RTVI compared to the control (8.6%).

The intervention also shifted behavioral preferences away from the state-controlled outlet. Participants in both treatment conditions were significantly less likely to prefer Rossiya-1 for the subsequent “dummy” task where respondents were given a choice between Rossiya-1 and RTVI (bottom panel of Figure 3). The decline in the preference for propaganda was especially pronounced in the *Rossiya+RTVI* condition (≈ 10 p.p.). Given that nearly 90% of the control group selected Rossiya-1, comparative evaluation of two stations doubled the share of respondents opting for the alternative outlet. Notably, this result is not driven simply by RTVI’s novelty: even respondents who never directly compared Rossiya-1 to RTVI (the *Rossiya+Kultura* condition) were less likely to select Rossiya-1 ($\hat{\tau}_S = -0.044$, $p = 0.024$). These findings indicate that task-driven scrutiny of political coverage can increase interest in more balanced media sources even if such evaluations are short and brief.

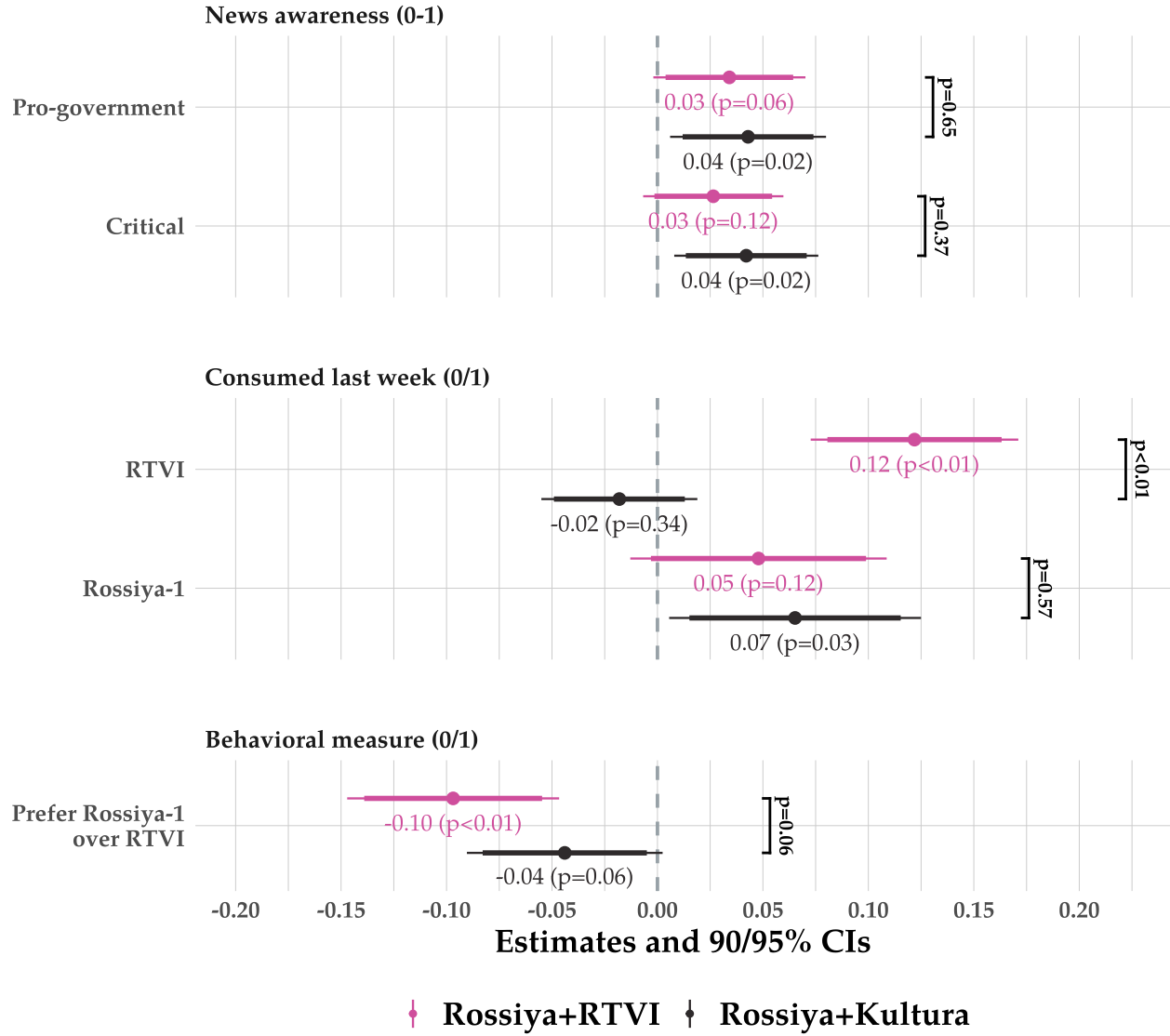


Figure 3: Intervention increased independent media consumption and interest in news.
Note: Benchmark is the control (*Kultura*) condition. Color gradients show the sampling t -distribution. Dots represent point estimates $\hat{\tau}_S$ (black lines) and $\hat{\tau}_I$ (pink lines) of ITT effects. Lines represent parametric confidence intervals. Brackets show p -values for a t -test of differences between the corresponding experimental groups.

Furthermore, across both treatment arms, we find similar increases in respondents' ability to recognize recent news headlines ($\approx 3 - 4$ p.p., top panel of Figure 3). This suggests a general increase in engagement with political news content rather than an outlet-specific effect.

Crucially, as anticipated in our pre-analysis plan, both treatments induced more critical evaluations of the Russian government. As detailed in Figure 4, participants in treatment groups reported weaker approval of the authorities and government policies, as well as stronger concern about the war in Ukraine. These findings suggest that prompting attentive engagement with media coverage leads to critical reassessments of government performance.

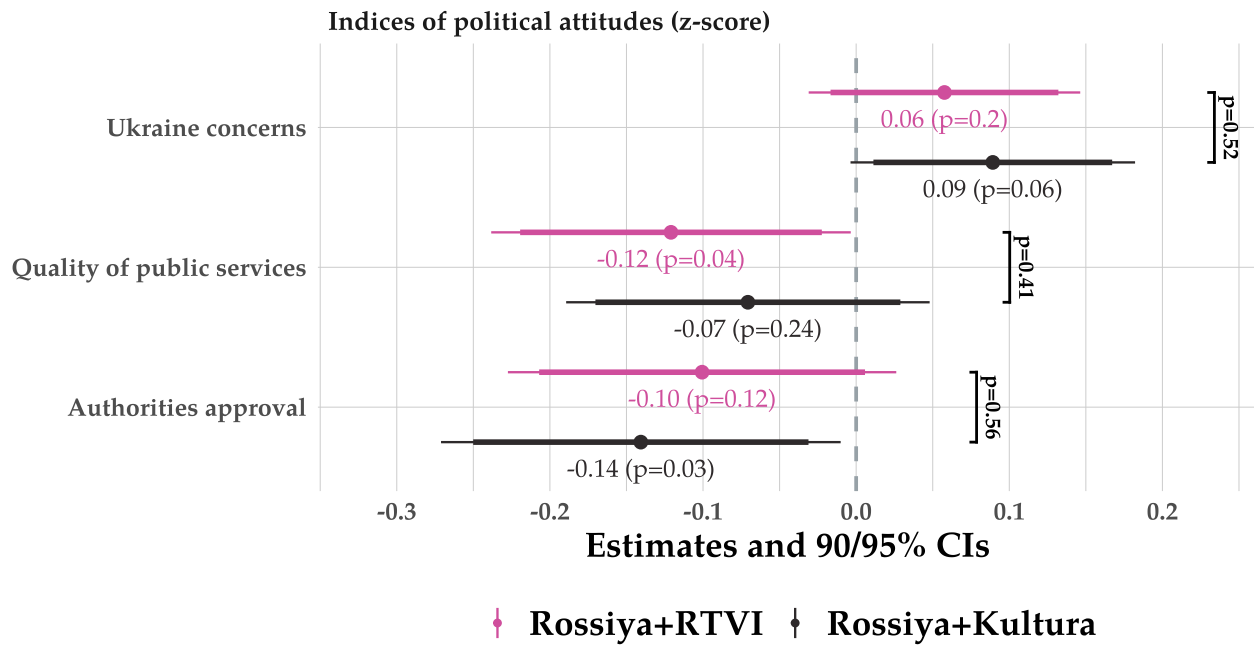


Figure 4: Intervention decreased approval of authorities and evaluation of government policies.

Note: Benchmark is the control (*Kultura*) condition. Color gradients show the sampling t -distribution. Dots represent point estimates $\hat{\tau}_S$ (black lines) and $\hat{\tau}_I$ (pink lines) of ITT effects. Lines represent parametric confidence intervals. Brackets show p -values for a t -test of differences between corresponding experimental groups.

4.2 Internal Validity

We pre-registered several manipulation checks to assess the comprehension of news videos in experimental tasks. Appendix C.5 shows that almost all respondents correctly answered questions about the news content they evaluated. We observe statistically significant differences in participants' ability to identify TV channels and topics across experimental groups, but these differences were small in magnitude and disappeared over time.

Following the pre-analysis plan, we also conducted several robustness checks: (i) placebo control task effects across waves (Appendix C.1); (ii) tests of the missingness-at-random (MAR) assumption (Appendix C.2); (iii) tests of experimenter demand effects (Appendix C.3); (iv) respondent attentiveness via embedded attention checks (Appendix C.4); and (v) baseline covariate balance (Appendix C.6). We found no evidence of meaningful violations of the corresponding assumptions.

Finally, leveraging the panel structure, we traced treatment effects over Waves 2–4 for outcomes measured repeatedly. As shown in Figure B1, the effects on independent media consumption and awareness of critical news increased over time, indicating sustained, accumulating impacts rather than wave-specific noise.

4.3 Mechanisms

All three causal pathways outlined in our theory require more attentive processing of the political reporting strategies of state and independent media than during habitual news consumption. This additional effort can lead to both a reassessment of specific media outlets and a more critical processing of news content in general. We first document the patterns of attention and learning resulting from our intervention and then discuss the evidence for each of the causal mechanisms.

Learning About News Reporting Patterns. Figure 5 confirms that both treatments

improved the participants' understanding of the political direction of Rossiya-1 and RTVI. First, participants who evaluated RTVI substantially updated their beliefs about its reporting patterns (Figure 5, pink lines). For many participants, this was clearly new information: only 4% consumed RTVI before the treatment. Second, the quiz administered in the endline survey also offers evidence of learning and attentiveness. Participants were asked to identify the source of six recent news headlines, choosing between Rossiya-1 and RTVI. Response accuracy increased by 6 p.p. ($p = 0.000$) among those who analyzed the coverage from both media outlets and by 4 p.p. ($p = 0.006$) among those who analyzed only state media.

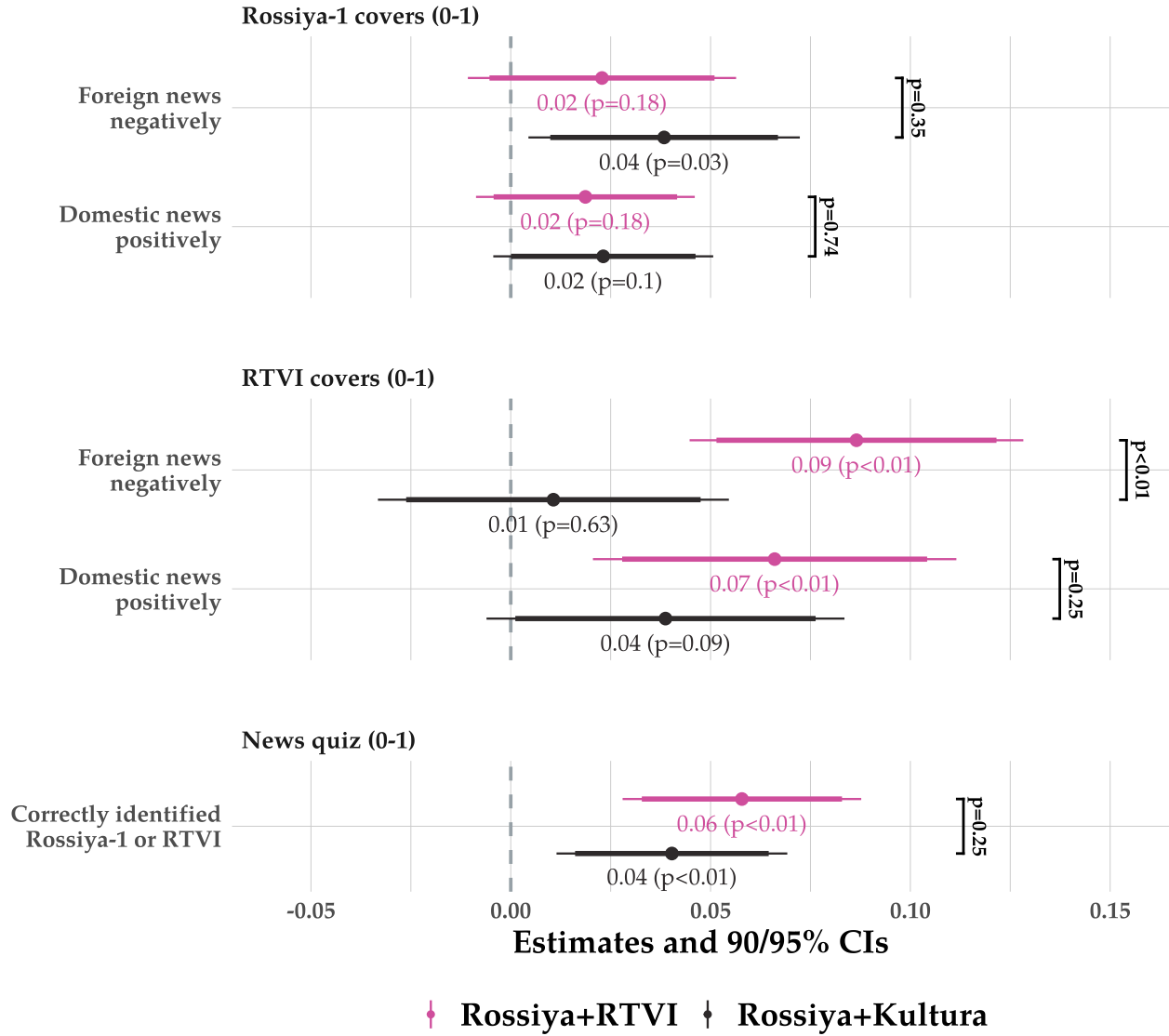


Figure 5: Intervention induced learning about the reporting patterns of Rossiya-1 and RTVI.
Note: Benchmark is the control (*Kultura*) condition. Color gradients show the sampling t -distribution. Dots represent point estimates $\hat{\tau}_S$ (black lines) and $\hat{\tau}_I$ (pink lines) of ITT effects. Lines represent parametric confidence intervals. Brackets show p -values for a t -test of differences between the corresponding experimental groups.

Next, we turn to the evidence for the three pathways discussed in Section 1.

Recognizing the Pro-Regime Bias. The pre-registered expectation that attentive processing exposes state media bias, leading citizens to reject biased outlets, finds little support. The intervention produced only marginal increases in recognition of Rossiya-1's pro-government slant (Figure 5) and did not change the perceptions of its overall bias (Figure 6). The most

plausible explanation is that most citizens are already aware of the political orientation of state media such as Rossiya-1, factoring it into their news consumption. This also explains why the intervention did not reduce state media use.

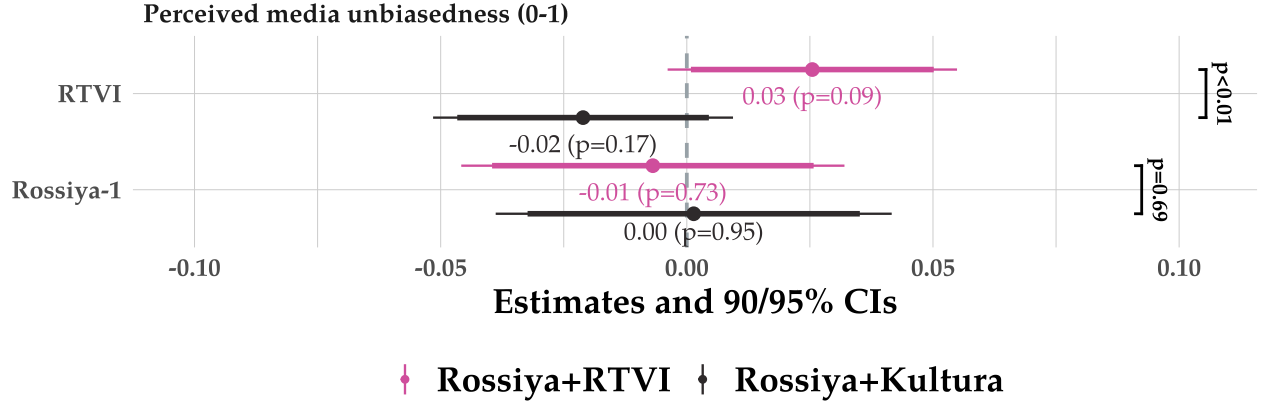


Figure 6: Intervention did not change the perceptions of state media bias.

Note: Benchmark is control (*Kultura*) condition. Color gradients show the sampling t -distribution. Dots represent point estimates $\hat{\tau}_S$ (black lines) and $\hat{\tau}_I$ (pink lines) of ITT effects. Lines represent parametric confidence intervals. Brackets show p -values for a t -test of differences between the corresponding experimental groups.

Diversification of News Consumption. To explore this mechanism, we leverage the fact that one of our treatments (the *Rossiya+RTVI* condition) exposed participants to a relatively unfamiliar independent outlet (RTVI); in the other condition (*Rossiya+Kultura*), respondents only examined state media. As shown in Figure 3, the treatment that included RTVI generated greater interest in this station’s reporting, significantly increased its consumption, and substantially reduced the relative preference for the state-run Rossiya-1. In addition, after the “dummy” task in the endline survey, which offered a choice between Rossiya-1 and RTVI for an additional brief content analysis, we asked respondents to explain their preference for one of the channels in their own words, which we then categorized based on the underlying logic of the response (Table B10). Participants in the *Rossiya+RTVI* arm most often motivated their choice for RTVI by its more neutral and less biased reporting, which indicates that direct comparisons between state and independent media can be powerful in reducing the impact of propaganda. In contrast, those in the *Rossiya+Kultura* condition most often explained their preference for RTVI by curiosity about a new outlet. Such

curiosity is another channel that can facilitate greater exposure to independent content. Overall, interest in diversifying news diets is therefore a highly plausible explanation for the main effects documented earlier.

These findings are in line with the long-standing argument that exposure to alternative news sources can erode regime support (Enikolopov et al., 2011; Green et al., 2024), but our study, importantly, finds strong evidence that such exposure itself can increase demand for alternative information. Our results also clarify that interest in novel and more balanced outlets may complement rather than substitute the (habitual) preference for state news content. The deterioration of regime support in this case stems not from reduced exposure to propaganda but from exposure to more critical media and, possibly, from the observed contrast between the two.

Cautious Information Processing. The results from the *Rossiia+Kultura* treatment also support the third hypothesized mechanism: attention to media reporting patterns fosters more careful and thoughtful information processing. While in this treatment arm, participants were not exposed to a novel, independent outlet, they still developed more critical views of the government. The decline in government approval despite virtually unchanged media usage and perceptions of bias suggests that the intervention likely prompted participants to subject state news content, which they continued to consume, to greater scrutiny. Evidence of greater news awareness—ability to recall recent news headlines—in this treatment arm (Figure 3) also indicates that the intervention increased attentiveness in the process of news consumption.

4.4 Effect Heterogeneity

To further clarify the mechanisms that puncture propaganda bubbles, we examine whether background characteristics moderate treatment effects. The pre-analysis plan posited attenuated effects among respondents with more extensive prior media consumption and

among those more convinced of Russian media bias—the intervention was less likely to provide new information and thus to induce learning about reporting patterns for these individuals. Conversely, we expected stronger effects among respondents who preferred unbiased information, as they might be more responsive to cues about media bias. As shown in Appendix B.5, we find no support for these expectations, consistent with the lack of evidence for the pre-registered mechanism of learning about pro-regime bias.

As specified in the pre-analysis plan, we also examine heterogeneity by political views, since motivated reasoning and selective exposure can lead regime supporters to discount disconfirming cues generated by heightened attention to media coverage. We split the sample into supporters and non-supporters of President Vladimir Putin. We classify as supporters respondents who rated their approval 4 or 5 on a 1–5 Likert scale. Figure 7 shows that the effects on political attitudes were concentrated among citizens already critical of the regime and among regime supporters who were exposed to new media outlet (*Rossiia+RTVI* condition). Among these citizens, intervention reduced approval of the authorities and their policies. Putin’s supporters who were only asked to analyze state media did not change political attitudes as a result of intervention.

A look at media consumption and news awareness also reveals important differences. While the treatment that asked to analyze RTVI coverage in addition to *Rossiia-1* increased RTVI consumption among both non-supporters and supporters, *Rossiia-1* consumption among supporters also grew as a result of both treatments. Further, the intervention made participants pay closer attention to information aligned with their pre-existing political preferences: awareness of critical headlines increased among non-supporters, and awareness of pro-government headlines rose among pro-Putin participants.

Taken together, these patterns underscore two powerful forces in authoritarian information environments: political alignment and habit. Among regime supporters, the intervention produced little change in political attitudes. We observe near-zero effects on approval,

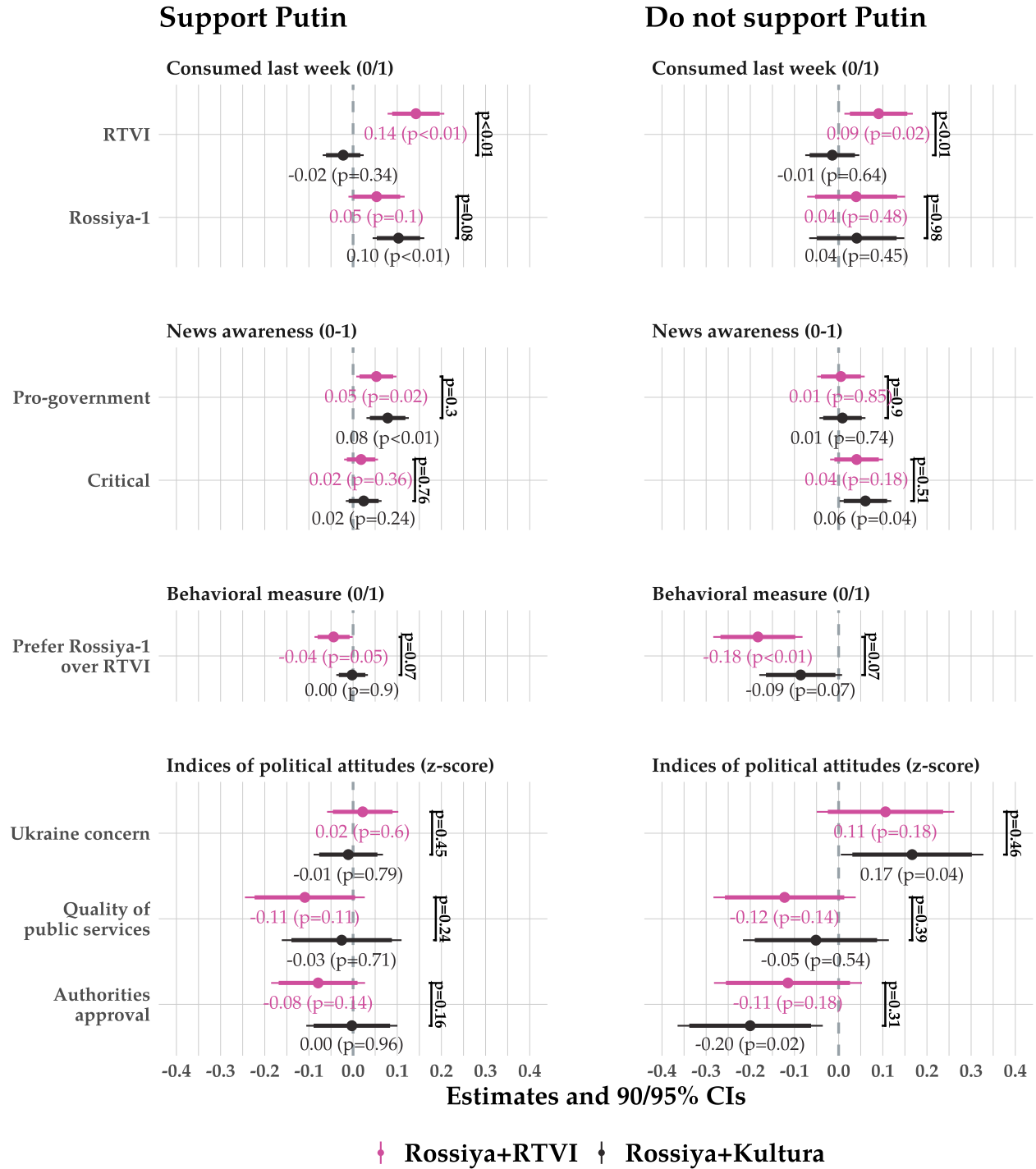


Figure 7: Citizens who support Putin were more resistant to the intervention.
 Note: Benchmark is control (*Kultura*) condition. Color gradients show the sampling t -distribution. Dots represent point estimates $\hat{\tau}_S$ (black lines) and $\hat{\tau}_I$ (pink lines) of ITT effects. Lines represent parametric confidence intervals. Brackets show p -values for a t -test of differences between the corresponding experimental groups.

service evaluations, and war-related concerns and some reinforcement of past media consumption habits (e.g., greater awareness of pro-government headlines and, in some cases, higher Rossiya-1 consumption). Still, we find evidence of movement even within this group—for example, modest increases in RTVI consumption and small declines in the preference for Rossiya-1—suggesting that direct comparisons of state and more balanced coverage can register even among supporters.

By contrast, the effects were concentrated among citizens we term “skeptics.” These skeptics are not necessarily hardline opponents. The group also includes moderate regime critics who rely on state media, often consuming such outlets daily, and who thus are embedded in the propaganda ecosystem (see Table A2 in the Appendix). For these respondents, prompting careful attention to reporting patterns leads to durable shifts: more interest in balanced outlets, higher news awareness, and more critical political evaluations, even without abandoning state media. In short, attentiveness—not exit—is the pathway.

The implications are both cautionary and encouraging. Deeply entrenched political alignments and media habits are hard constraints. Light-touch interventions that focus attention on already consumed news are unlikely to move committed regime supporters much. Yet, pairing state media with more balanced non-government sources can produce shifts even among supporters. As for moderately skeptical audiences, in a propaganda-saturated news environment like Russia, minimal prompts to pay attention to coverage can yield meaningful population-level effects by nudging such consumers toward more critical processing and diversification of their media diets.

5 Conclusion

Our experiment demonstrates that brief, targeted interventions can encourage citizens to approach authoritarian propaganda with greater skepticism and increase their consumption

of independent news. In the study, heightened attention to the political agenda of the main state television station (Rossiya-1) and comparing it to a more critical independent channel ultimately fostered more critical evaluations of the Russian government, diminishing the influence of its propaganda apparatus. Importantly, the intervention we designed did not require extensive immersion in media reporting; it amounted to less than two hours of reflective news consumption spread across four weeks.

Our findings further demonstrate that facilitating the consumption of truthful, independent reporting is not the only way of countering government propaganda. Even when citizens remain confined to state media consumption, encouraging more attentive news processing of state messaging can effectively undermine propaganda's influence. Such heightened attention may also emerge naturally, resulting from exogenous shocks such as economic crises.

At the same time, our analysis reveals key limitations related to media literacy interventions in authoritarian countries. First, prompting attentiveness to political news is more effective in reducing regime's political support among citizens with existing doubts. Conversely, those with deeply entrenched preferences for pro-government narratives remain unaffected. Thus, strategies for disrupting propaganda ecosystems must acknowledge audience heterogeneity and strategically target consumers receptive to government criticism.

Second, despite the intervention, even more skeptical participants continued relying primarily on state media, including Rossiya-1, and failed to update their beliefs about its bias. Furthermore, among pro-regime citizens, the exposure and attention to pro-government information increased. Therefore, it may be unrealistic to expect counter-propaganda efforts to dramatically undermine the dominance of state media. Fostering skepticism without outright rejection of state outlets may prove more productive.

Our results also shed more light on the dynamics of media consumption in autocracies,

suggesting that interest and trust in official propaganda are strongly linked to pro-regime sentiment. While dramatic declines in regime approval may lead citizens to quickly abandon state media, gradual erosion of support is likely to produce a slower withdrawal from propaganda consumption, with many pro-regime citizens continuing to avoid independent alternatives.

In addition, our findings may be relevant beyond authoritarian contexts. Recent work in the U.S. ([Broockman and Kalla, 2024](#); [Hopkins and Gorton, 2024](#)) suggests that promoting higher-quality journalism faces serious obstacles when audiences are attuned to partisan media sources. While our study demonstrates that similar challenges exist in authoritarian regimes, it also identifies a promising intervention that may help expand the awareness of and interest in more balanced reporting.

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A Additional Study Information

A.1 Ethical Considerations

Two primary concerns arise around this study related to the political situation in Russia.

First, due to the frequently changing legislation that can lead to administrative and/or criminal prosecution for expressing certain political views, ensuring the anonymity and confidentiality of responses from Russian residents is crucial. To mitigate this risk, the research team collecting survey and opinion data never acquired any personally identifiable information (PII). TGM Research, the survey company responsible for providing anonymized IDs to link responses across waves, did not have access to the survey data collected by the researchers. This separation was achieved by implementing the survey on the Qualtrics platform, which is secured under password-protected research accounts. Qualtrics data servers are located outside Russia, making it difficult for Russian government officials to access the data without unauthorized entry into the researchers' accounts.

The study also purposefully avoided asking overly sensitive or implicating questions, such as support for the opposition or views on materials deemed extremist by the Russian government. The survey focused only on general media and political attitudes, similar to those commonly used by state polling organizations in Russia like VCIOM or FOM. Consequently, even under current laws, if Russian government officials were to gain access to the study data, it would not be incriminating for the participants.

Second, the intervention itself exposed participants to pro-government media content, which in the Russian context can be misleading and potentially sensitive. Yet, the content used for the intervention was publicly available, and the majority of the sample reported at least infrequent exposure to Rossiya-1 or other pro-government TV channels. Moreover, the research only included abstracts (headlines) of news reports, which typically did not include the most false and propagandistic statements aired by Russian state television.

In addition, even though our intervention did not involve any deception, we mitigated unanticipated negative consequences by including a debriefing at the end of Wave 4. This debriefing explained the purpose of the study and its experimental nature.

A.2 Deviations from the Pre-Analysis Plan

The core analyses presented in the manuscript follow the pre-analysis plan (PAP) published prior to the endline data collection at osf.io/d7w8q. Nevertheless, there are several deviations from the originally posted pre-analysis plan, which we describe below.

The initial theoretical expectations laid out in the PAP correspond to the first theoretical pathway discussed in Section 1 (recognizing the pro-regime bias of state media). This expectation was not supported in our data; specifically, we do not find that citizens change their perceptions or consumption of pro-government media as a result of our intervention. However, the intervention did affect various other pre-registered outcomes, including political beliefs, the perceptions and consumption of independent media, and news awareness. To reconcile the findings, we reorganized the theory, proposing two additional mechanisms that could lead to changes in political views without altering the perceptions or consumption of pro-government media: (1) increased interest in independent media and (2) more attentive processing of information from state media. These mechanisms may explain the observed empirical patterns. As such, the interpretation of the main findings in line with these two additional pathways is exploratory in nature, and further pre-registered tests are needed to confirm these results.

We also modified the empirical tests we perform, as presenting the results exactly as specified in the PAP would be misleading. First, as a result of adjusting our theoretical expectations, throughout the analyses, we test two-sided hypotheses instead of the directional hypotheses suggested by our original theoretical expectations. Second, we do not perform the pre-registered omnibus tests, as those were designed to test the original theoretical expectations, which we do not find support for. Third, given that we do not find evidence of violation of the missingness-at-random (MAR) assumption and given high attrition rates in the double-sample we implemented, we do not explicitly use the double-sample procedure proposed by [Coppock et al. \(2017\)](#) and specified in the PAP; instead, we include the double sample as part of the main sample in our analyses. Fourth, for ease of exposition, we explore heterogeneity in the main text using subgroup analyses. Finally, in addition to pre-registered tests of heterogeneous effects, we also conduct heterogeneity analyses based on political preferences (Putin approval) and prior usage of state media, which were

mentioned in the PAP as part of exploratory analyses and should be interpreted as such.

A.3 Study Timeline

The study was conducted in 2023 using four survey waves. We embedded experimental tasks to watch news broadcasts and evaluate these broadcasts at the end of survey Waves 1–3.

Survey Wave 1 (baseline). This wave served two purposes: (1) measuring the relevant outcomes of interest and sociodemographic controls prior to the intervention to improve precision by controlling for a set of background characteristics and (2) enrolling the sample for the panel study from TGM Research’s pool of respondents. The baseline survey included several groups of questions designed to measure the knowledge of state and independent media, respondents’ previous media consumption, beliefs about the media environment in Russia and the bias of individual outlets, evaluation of government policies, and support for the government.

Survey Waves 2 and 3 (midline). These two waves aimed to measure intermediate beliefs about media reporting, media consumption, and the awareness of news stories recently published by state and independent media.

Survey Wave 4 (endline). The final wave included questions similar to the baseline survey as well as additional questions about the perceptions of media outlets, the evaluations of the Russian government, its policies, economic performance, economic expectations, and attitudes toward Ukraine and other countries and toward the Russian-Ukrainian war. This wave did not include experimental content analysis tasks.

A.4 Outcome Measurement

Knowledge of Political Reporting Patterns

We measured the understanding of the political reporting patterns adopted by Rossiya-1 and RTVI via four variables:

Covering domestic news positively and covering foreign news negatively. These variables were derived from two survey questions:

- *For every media outlet listed below, please evaluate how likely it is that the outlet will cover successes of the Russian economy and achievements of Russian authorities, on a scale from 1 to 4, where 1 is unlikely, and 4 is very likely?*
- *For every media outlet listed below, please evaluate how likely it is that the outlet will cover problems and difficulties in other countries, on a scale from 1 to 4, where 1 is unlikely, and 4 is very likely?*

Both questions asked respondents to evaluate Rossiya-1, RTVI, and another Russian news outlet, RBK. For the analysis, both variables were recoded from the original scale (1–4) to take values between 0 and 1.

Correctly identifying RTVI headlines and correctly identifying Rossiya-1 headlines. These two variables are derived from the following “quiz” question:

- *Media may differently approach the selection of news stories that they cover. Now, we will ask you to read six news headlines published by TV channels Rossiya-1 and RTVI. Please indicate which outlet, in your view, has published each of these stories.*
 - *Two Leopard tanks have been destroyed in Kupyansk, and two more in the area of Svatovo*
 - *Russia has endured an unprecedented pressure and sanctions onslaught. GDP has reached the 2021 levels*
 - *Biden’s son lost white powder in the White House, and father Biden got lost himself*
 - *[The president of Chechnya Ramzan] Kadyrov has published a video of his son beating a prisoner*
 - *In Russia, a woman has been sentenced for failing to report for military service, a first conviction of such kind. The court sentenced her to six years in prison despite her pregnancy*
 - *Ukraine has struck Sevastopol. Two ships of the Russian Black Sea Fleet sustained serious damage*

The first three headlines were aired by Rossiya-1 and the last three by RTVI; respondents saw the headlines in a randomized order. The Rossiya-1 headlines praised Russia’s military and economic successes and mockingly reported on the United States, whereas the RTVI headlines featured problems in Russia and Ukraine’s military successes. Evaluating the sentiment of headline segments in the previous survey waves was designed to highlight these specific reporting

tendencies of the two TV stations. We counted the headlines that each respondent identified correctly separately for Rossiya-1 and RTVI headlines. Both variables were then rescaled from the original range (0 to 3) to take values between 0 and 1.

Perceptions of Media Bias

To capture the perceptions of whether Rossiya-1 and RTVI are unbiased and politically independent, we relied on the following two questions (as above, both questions featured Rossiya-1, RTVI, and RBK):

- *For each of the following media outlets, do you agree that this outlet reports news in an unbiased way?* [Answer options: from 1 = “Completely disagree” to 4 = “Completely agree”]
- *In your opinion, to what extent do the Russian authorities influence the editorial policies of media outlets listed below—that is, the kinds of news stories that these outlets publish and the angles they adopt in reporting news stories?* [Answer options: 1 = “The authorities completely determine the editorial policy”; 2 = “The authorities partly influence the editorial policy”; 3 = “The authorities have almost no influence on the editorial policy”]

We rescaled both variables to the 0–1 range and averaged them to create a single measure of the perceived media bias, where 1 corresponds to strong bias, and 0 to the absence of bias.

Media Consumption

We measured media consumption and media preferences in three ways. First, we asked the participants which news sources they had used in the past week, choosing from two lists of pro-government and independent outlets, as described below. Pro-government (state-controlled) outlets are labeled here as **G** and independent outlets as **I** (the respondents were not shown these designations).

- *Which of the following television news broadcasts have you watched in the past week?* [Answer options: Rossiya-1 / Rossiya-24 (**G**); Pervyi Kanal (**G**); Zvezda (**G**); NTV (**G**); Pyatyi Kanal (**G**); Russia Today / RT (**G**); RBK; Dozhd' (**I**); RTVI (**I**); Euronews (**I**); I don't watch any of these stations]
- *Which of the following websites have you used in the past week to learn the news?* [Answer options: Yandex.Novosti; Rambler Novosti; Novosti Mail.ru; Russia Today / RT (**G**); RIA Novosti (**G**); Vesti.ru (**G**); Lenta.ru (**G**); Gazeta.ru (**G**); Komsomolskaya Pravda (**G**); Moskovskii Komsomolets (**G**); Argumenty i Fakty (**G**); Izvestiya (**G**); Rossiiskaya Gazeta (**G**); Life.ru (**G**); Kommersant; RBK; Vedomosti; Novaya Gazeta (**I**); Mediazona (**I**); Znak.com (**I**); Meduza (**I**); Dozhd' (**I**); BBC (**I**); Deutsche Welle (**I**); Radio Svoboda (**I**); RTVI (**I**); Euronews (**I**); None of the above]

We constructed four variables: two dichotomous variables indicating whether the respondent reported **consuming Rossiya-1 or RTVI**, respectively, and two indices counting the **total number of pro-government and independent outlets the respondent reported consuming**. The two indices were divided by the total number of pro-government or independent outlets presented in the survey questions above, resulting in the ratios of the total number of pro-government or independent outlets, respectively. Therefore, all media usage variables take values between 0 and 1.

Second, we included a “**behavioral**” measure of preferences for Rossiya-1 or RTVI by asking which of these channels they would choose for an additional task. We presented the choice as follows:

- *Now, we will ask you to evaluate the quality of one short television news excerpt and assess how engaging and interesting is the report. Choose one of the two television channels to evaluate. Which one do you prefer?* [Answer options: Rossiya-1; RTVI]

The two channels were shown in a randomized order. The “behavioral” measure of media preference takes the value 1 if

Rossiia-1 was chosen and 0 if RTVI was chosen.¹⁰

Third, we assessed respondents' **awareness of recent pro-government and critical (independent) news reports**. This measure indirectly captures media consumption, as awareness of news stories is correlated with their consumption, and indicates interest in news consumption. To measure awareness of recent news topics, we asked respondents to consider a list of news headlines and indicate which of these headlines were familiar to them:

- Which of the following news stories have you heard recently? Please choose all that apply.
 - Putin spoke with the government about fuel prices and asked not to take additional revenues away from the regions.
 - The U.S. has enough funds for military supplies to Kyiv for only a few weeks.
 - Putin visited a support center for participants of the special military operation in Veliky Novgorod.
 - Russian peacekeepers are delivering humanitarian aid to the residents of Karabakh and ensuring the ceasefire regime.
 - In the Tula region, state diplomas were awarded to drone operators.
 - Russia may request the extradition of SS officer Hunka.
 - More than half of the mobilized soldiers who died had spent less than five months on the front, according to calculations by "Important Stories" and CIT.
 - [Putin's aide Vladimir] Medinsky will amend the history textbook following Chechnya's dissatisfaction with the chapter on repressions.
 - [Armenia's prime minister Nikol] Pashinyan stated that Russian peacekeepers had "failed" in Karabakh.
 - Ukraine and Poland agreed to find a joint solution for grain exports.
 - [Russian opposition politician Alexey] Navalny has been transferred for a year to a single-cell type facility.
 - Roskomnadzor demanded the removal of the highest-grossing Yakut film in history, Aita, from Russian online cinema libraries.
 - I haven't heard any of these news stories.

The first six headlines were taken from state-controlled media outlets, and the following six were taken from independent (critical) news outlets. When selecting news headlines, we made sure that the pro-government headlines were published only by state-controlled outlets (not by independent outlets), and the critical headlines were published only by independent news outlets (not by pro-government outlets).

We then created two indices representing the proportion of, respectively, pro-government and critical stories that respondents recognized. The original indices took values between 0 and 6, and the rescaled variables were in the range between 0 and 1.

Political Attitudes

We constructed three indices of political attitudes.

Authorities approval. This index is the average approval for the president, the government, the regional governor, and the United Russia party (party closely affiliated with the president). The index is based on the following survey questions:

- Do you approve of the actions of XXX [Answer options: from 1 = "Completely disapprove" to 5 = "Fully approve"]

Where XXX included the following actors: (1) the prime-minister and the cabinet of ministers of Russia; (2) the president of Russia; the governor (head) of the respondent's region; and (3) the United Russia party. We rescaled the approval of each actor to the 0–1 scale and created the final index by averaging across the four actors.

Quality of public services represents respondents' average evaluations of the quality of government services, based on the following question:

¹⁰ After indicating their choices, respondents were taken to the next page where they were shown either a Rossiia-1 or a RTVI segment approximately 25 seconds long. Both segments were about forest fires in the Mediterranean and did not include any political statements. After the segment, we asked the respondents whether the video had loaded and whether they agreed that the report was engaging and interesting. We also asked them to explain why they chose Rossiia-1 or RTVI in a few words (these responses are summarized in Table B10).

- *How would you evaluate the quality of the following basic services provided by the state in the area where you live?* [Answer options: from 1 = “Very bad” to 7 = “Very good”]

The following six services were assessed: (1) Healthcare (the quality of and access to healthcare services); (2) Education (the quality of and access to secondary education); (3) Transport infrastructure (the quality of roads, public transportation); (4) Welfare benefits (unemployment benefits, pensions); (5) Environmental protection and waste collection; (6) Public order (the quality of law enforcement services). We rescaled the respondents’ evaluations of each service to the 0–1 scale and created the final index by averaging across the six services.

Ukraine concerns. Index capturing concern about Russia’s war on Ukraine from five items (verbatim wording):

- *Do you follow the situation around Ukraine?* [Answer options: from 1 = “Do not follow at all” to 4 = “Very closely”]
- *Are you concerned about the current developments around Ukraine?* [Answer options: from 1 = “Not concerned at all” to 4 = “Very concerned”; “Hard to say” dropped]
- *How, in your opinion, will the developments around Ukraine influence Russia’s. . .* [Answer options: -1 = “Will become weaker”; 0 = “Nothing will change”; 1 = “Will become stronger”]
 - . . . economic prospects?
 - . . . role in international politics?
 - . . . military potential?

Each item was standardized by centering on the control (*Kultura*) group mean; the index is the average of the five standardized items. Positive values indicate greater concern relative to the control mean.

A.5 Sample Characteristics

Enrollment in the baseline survey was limited to 2,000 participants, which resulted in 2,037 completed responses: 688, 691 and 658 participants assigned to *Kultura*, *Rossiia+Kultura* and *Rossiia+RTVI* groups, respectively (see below on treatment conditions). All participants enrolled in the baseline were invited to participate in midline surveys, but due to logistical restrictions, we stopped enrollment in those two waves after reaching 1,500 and 1,200 complete responses, resulting in 1,596 and 1,302 completed responses. The samples in the two midline waves largely overlapped: only 68 participants completed the baseline survey, skipped the first midline survey, but returned in the second midline survey.

The stopping rule may have introduced non-random selection into midline waves. In the endline, we first sampled 950 participants using a stopping rule, as before, and then immediately followed up with a double-sampling procedure (Coppock et al., 2017) to sample 25% of those who initially missed the endline, stratifying the sample by experimental conditions and by subgroups of study participants who missed at least one of previous waves. In total, including double sampling, 1,176 participants completed the endline survey, forming our main sample.

Table A1: Descriptive characteristics of the final study sample

Variable	Obs	Mean	SD	Min	p25	p50	p75	Max
Socio-economic characteristics								
Age	1176	44.81	12.06	19	36.00	45.00	54.00	80.00
Female	1175	0.48	0.50	0	0.00	0.00	1.00	1.00
Education	1176	2.55	0.68	0	2.00	3.00	3.00	3.00
Income level (categorical)	1176	2.82	0.88	0	2.00	3.00	3.00	5.00
Employed permanently	1176	0.74	0.44	0	0.00	1.00	1.00	1.00
Use of advanced Internet technologies								
VPN	1050	0.50	0.50	0	0.00	1.00	1.00	1.00
Total (out of 8)	1176	3.22	2.13	0	2.00	3.00	5.00	8.00
Overall news consumption								
Frequency (categorical)	1176	2.74	0.63	0	3.00	3.00	3.00	3.00
From TV	1142	0.80	0.40	0	1.00	1.00	1.00	1.00
From online media	1142	0.73	0.44	0	0.00	1.00	1.00	1.00
Recently consumed news								
From Rossiya-1	1175	0.68	0.47	0	0.00	1.00	1.00	1.00
From RTVI	1175	0.04	0.19	0	0.00	0.00	0.00	1.00
Intensity of state media use	1173	0.24	0.18	0	0.12	0.19	0.31	0.88
Intensity of indep. media use	1173	0.07	0.15	0	0.00	0.00	0.11	1.00
Attitudes								
Perception of Russian media as unbiased	1176	0.52	0.28	0	0.33	0.67	0.67	1.00
Strength of preference for unbiased news	1176	0.36	0.23	0	0.25	0.25	0.50	0.75
Presidential approval	1173	0.60	0.49	0	0.00	1.00	1.00	1.00
Government focuses too much on								
Law and order	1176	0.09	0.29	0	0.00	0.00	0.00	1.00
Foreign affairs	1176	0.12	0.33	0	0.00	0.00	0.00	1.00

Table A2: How different are those who support and do not support Putin?

Variable	Group mean		Std. Diff	P-value
	Support Putin	Do not support Putin		
Socio-economic characteristics				
Age	44.74	43.84	0.07	0.24
Female	0.47	0.44	0.07	0.31
Education	2.53	2.65	-0.17	0.00
Income level (categorical)	2.91	2.79	0.14	0.03
Employed permanently	0.77	0.71	0.15	0.01
Use of advanced Internet technologies				
VPN	0.41	0.62	-0.43	0.00
Total (out of 8)	3.44	3.87	-0.20	0.00
Overall news consumption				
Frequency (categorical)	2.87	2.80	0.11	0.01
From TV	0.90	0.64	0.69	0.00
From online media	0.73	0.79	-0.15	0.02
Recently consumed news				
From Rossiya-1	0.81	0.52	0.64	0.00
From RTVI	0.03	0.05	-0.10	0.15
Intensity of state media use	0.29	0.19	0.55	0.00
Intensity of indep. media use	0.05	0.11	-0.43	0.00
Media attitudes				
Perception of Russian media as unbiased	0.63	0.33	1.25	0.00
Strength of preference for unbiased news	0.34	0.41	-0.33	0.00
Government focuses too much on				
Law and order	0.05	0.17	-0.41	0.00
Foreign affairs	0.05	0.24	-0.61	0.00

Note: The column 'Std. Diff' reports the differences between Putin supporters and non-supporters in standard deviations.

A.6 Consistency of Broadcasts Across Treatments

Our intervention randomly assigned respondents to watch and analyze video news segments from different Russian television channels. One challenge with this intervention was to ensure the consistency of news broadcasts across the main treatment groups (*Rossiya+Kultura* and *Rossiya+RTVI*). To address this issue, we selected recent news broadcasts according to the following guidelines:

- **Similar quality of reporting:** All news broadcasts (including the *Kultura* arm) were similar in the quality of production. They came from daily evening news reports and included similar types of audiovisual presentation—in each case, it was a collection of video clips previewing segments included in the news broadcast, accompanied by chyrons, the anchor’s voice, and background music. The similarity in the quality and style of news highlights production was one of the reasons for the selection of RTVI as one of the outlets in the study. In Table B8, we demonstrate that the respondents indeed evaluated the production quality and the degree of their interest in the videos by *Rossiya-1*, RTVI, and *Kultura* very similarly.
- **Focus on the main topics covered in each broadcast:** Since the main aim of the intervention was to highlight the selective reporting approach used by pro-government media, we used the news headline segments shown at the beginning of each news broadcast.
- **Topic selection:** When selecting broadcasts for the tasks, the fact that both *Rossiya-1* and RTVI covered the events of the day ensured a certain similarity of topics across channels, although we also selected days when the two channels covered some divergent topics, which showcased partisan coverage filtering.
- **Similar duration of reports:** The duration of all news broadcasts selected for treatment and placebo control tasks in each of the waves was roughly similar (each segment was 1–2 minutes long).

See Table A3 for the transcripts of all segments.

Table A3: Transcripts for videos included in waves 1, 2, and 3

Wave	Channel	Experimental group(s)	Broadcast date	Transcript
1	Kultura	Placebo, Rossiya +Kultura	6/30/2023	Hello! It's time for the news on the Kultura TV channel. My name is Anna Apolonova. Briefly about some topics of the issue. Exchange of customs. The first days of the Alexandrin Theater in Buryatia are completed with a performance by Valery Fokin. Quarter of a century without repairs. 82.5 million rubles were allocated. In the town of Bekeshevskoye, the building of the House of Culture with columns and mosaics will be restored. Art against art. Even within one union, artists and architects moved in different directions. The exhibition in the old National Gallery of Berlin is about the leaders of the isolated artists.
1	Kultura	Placebo	7/6/2023	It's time for the news on TV channel Kultura, Egor Bidulya is in the studio. Hello! Concerts under the open sky. The festival "Summer. Music. Museum" opened in Istria. Comedy about bitter life. Orientations are changing, values are changing, life is changing. "Botanical Giselle", a premiere on the small stage of the Chekhov Theatre. "May the force be with you!" Moscow is full of great prospects. "There are very different cool people around you." How the entrance exams at the GITIS department of acting are going.
1	Kultura	Placebo, Rossiya +Kultura	7/10/2023	Hello! Time for news on our channel; Elena Pahomova is in the studio. Briefly about some topics of the issue. E2-E4. This is the most recognizable move. The aesthetics of chess, the most popular board game, are explored in the Museum of Modern History of Russia. Addresses of the Vologda cinema. The main characters go from their native village to the city of Vologda. How in the city they keep the memory of the filming of the film Kisses of the Dawn. It came out on the screen 45 years ago. Today, the buzzing fly is the birthday girl. She picks up the keyboard: dear GPT, tell me how to invite guests. For the centenary of Chukovsky's fairy tale, the students of the Boris Trofimov workshop prepared an unusual exhibition.
1	Kultura	Placebo	7/12/2023	Hello! Time for news on our channel in the studio. Elena Pahomova briefly about some topics of the issue. Everyone is laughing. There is a huge number of symbols, images, characters, phrases that you can play with. Classical and modern comedies in the program of the cinema Gorky Fest. The elevator as an art. For us, the preservation of historical elements is one of the main goals. The architects of Barcelona make up the map of the elevators of the beginning of the 20th century. Born from the past. What was built in recent years was the repayment of old debts. The exhibition in the Museum of the History of Lefortovo about the features of the ring-style planning of the capital.

1	RTVI	Rossiia +RTVI	6/30/2023	<p>The French are furious. Dozens of thousands of people around the country went out into the streets because of the murder of a teenager by the police. Protests have spread into chaos. 500 buildings have been damaged, 2,000 cars have burned down. Because of the chaos, Macron has left the US summit, and in Paris they are already thinking about introducing an emergency situation. There is no rebellion. The Russian authorities consider the armed protest of Yevgeny Prigozhin. "Complete chaos and civil war. This is what you prevented." Vladimir Putin thanks the military, and officials sign in allegiance to the President. What an attempt to salute to Vladimir Putin once again, symbolically significant enough. What motivated Yevgeny Prigozhin in his march of justice? And is there a future for the PMC Wagner? Mikhail Sheptun will tell you. In Ukraine, large-scale exercises are taking place in case of an accident at the Zaporozhye NPP. The residents are given iodine, and the rescuers are deployed to field hospitals. In Kiev, they are confident that the Russian troops will blow up the NPP or create conditions for a technogenic catastrophe. Is this scenario possible? Another round of negotiations between Armenia and Azerbaijan took place in Washington. The two sides failed to agree on the most important issues. What can this lead to? Artur Khachatryan from Armenia tells us. CNN published a recording of a conversation of the former President of the United States with his employees. There, presumably, Trump reveals secret information about the attack on Iran. The world-famous Hollywood producer Arnon Milchin gives testimony against Benjamin Netanyahu in court. As the best friend of the Israeli Prime Minister, he became the main witness of the accusation. Why does the court propose to the prosecutor's office and Netanyahu's lawyers to negotiate? Details about the main judicial process in Israel in Boris Stern's report. In China, an analogue of the winter forum in Switzerland took place. The so-called summer Davos. And this is not some kind of mockery to the West, but quite an official event of the World Economic Forum. There, China spoke about its economic future. Will there be a new trade war with the United States? I, Arseniy Molchanov, will tell you about it. Minus 15 kilograms without diet and exercise. The drug Ozempic seems to many losing weight today to be a real panacea. Politicians, Hollywood stars and businessmen lose weight on it. The wait list in pharmacies has stretched for months. How did the drug for diabetics become the main trend of the season? And what side effects do magic injections have? Liza Parshina figured it out. A long-awaited flight for Branson. Virgin Galactic delivered its first commercial flight to the borders of space. Now humanity is one step closer to regular commercial flights i</p>
1	RTVI	Rossiia +RTVI	7/10/2023	<p>Prigozhin with his PMC, as it became known, still visited Moscow, and the Bahmut he took is already under fire control of the Armed Forces of Ukraine. Details of the 502nd day of combat operations in Ukraine. Last preparations: how NATO allies are preparing for the summit in Vilnius, which starts tomorrow. Parliamentary drama in Israel: the coalition plans today to hold the first reading of one of the fundamental laws of legal reform. The opposition threatens total protest, but is ready for negotiations. Boris Stern followed the development of events in Israel today for the Big Newstalk. Shavkat Mirziyoyev easily re-elected for a third term. What awaits the 36-million Uzbekistan?</p>
1	Rossiia-1	Rossiia +RTVI, Rossiia +Kultura	6/30/2023	<p>On the air of the Russian TV channel Bolshie Vesti, Ernest Matskevichus is in the studio. Hello, the main events of this Friday in our issue. Iskander strikes at the enemy forces that are buried at the foot of the Antonovsky bridge. The flight is destroyed, 30 militants are eliminated. The Armed Forces of Ukraine tried to attack immediately in several directions. The attacks are reflected. What is happening in the Artyomovskoe area, Grigory Vdovin transmits from Soledar. How and who will now serve the trophy British Huskies and Mastiffs? And what did the wounded fighter of the Armed Forces of Ukraine, who was left in an armored vehicle, tell? There is no money in the budget of the EU. Where is the money? We know the answer. Kiev will not receive 50 billion euros from the EU until it shows where the 70 billion will go. Viktor Orban set the conditions. What else could the EU summit in Brussels not resolve? Macron hastily left the summit. France is on fire. Stolen shops, several supermarkets and hotels are burned down, the commissariat is captured and destroyed. The head of the Ministry of Internal Affairs requires to completely stop public transport in the country. Zelensky sanctioned the withdrawal of Christian objects from the Kyiv Lavra, including the relics of the saints, and the transfer of them abroad. Some of the relics can already be in Canada and France. How can Greta Thunberg, who came to Kiev, help the Nazis? Zelensky's regime began preparations for provocations on the Zaporizhzhya AIS. The younger Biden is being judged, the older one is running away from the studio. Trump believes that Ukraine must surrender to its territory. Polish authorities have announced the arrest of Russian hockey player Maxim Sergeev on suspicion of espionage. What is he accused of? The legendary international competition of Tchaikovsky called the winners. Who flew to Moscow this year? Everything cut us off from the settlement. A large-scale flood in the Irkutsk region. Why did it come out of the banks of the Kiring River? Almost a thousand people in Sheremetyevo B and C flew without luggage. Why was there a failure, and when will the luggage catch up with their owners? How did the car price increase two times by the moment of purchase? Our investigation. He is trusted by the heads of state, and based on his reports and films, history can be taught. Our colleague, TV journalist Andrey Kondrashov, is 50 today.</p>
1	Rossiia-1	Rossiia +RTVI, Rossiia +Kultura	7/10/2023	<p>In the air of the Russian TV channel Bolshie Vesti, in the studio Ernest Matskevichus, hello, the main events of this Monday in our broadcast. The south of Russia was attacked by the rains. They can't hold it. On the federal territory of Syrius, the regime of emergency. Hundreds of flights are detained in Adler, the railway embankment in Abkhazia is undermined. The rains will continue, the beaches are closed. Possible waterspouts on the sea. What is happening on the Crimean Bridge? Nizhny Novgorod and Tobolsk are also in the water. In the area of special operations, by the beginning of July, almost 5000 foreign mercenaries were liquidated. Why are they dying first? The VSO-S-200 complexes, remodeled from anti-aircraft, must be destroyed. The task was set by the General Staff. When there was water, they were destroyed. Of course, we have been waiting for a year. Now we are waiting for the personnel, the equipment of the enemy. What tasks do our units solve in the vicinity of the Zaporozhye AIS? How does Udmurtia help the front? What kind of medical equipment is produced at the Izhevsk motor plant? What the head of the republic reported to the president. Completely our Russian "Swallow," maximum speed 200. What kind of electric vehicles are produced in Lipetsk? Thousands of companies from 35 countries. What surprised the guests of the international exhibition Innoprom? The heads of NATO countries are going to Lithuania to understand what to offer Ukraine. So far, there is no solution. On the way to Vilnius, Biden visited London. Why did he anger the British again? And why didn't he talk about the results of the negotiations with Sunak? The head of the Federation Council is in Beijing. What questions are discussed with the chairman of the People's Republic of China? As the goods turnover rises three times, the heads of NATO countries of the Persian Gulf flew to Moscow. What was the joint plan of action? "I'm going for gasoline, for food. I want to cut my hair." All the good things are sometimes over. Why can't the Finns sweep off cheap fuel and food in Russia anymore? What awaits them on the border now? "Take a picture. Thank you very much. Don't spill it, please. I'll grab some ice and that's it." Will there be silence on the Patriarchs? The measures are taken; what did the first attempt result in?</p>

2	Kultura	Placebo	8/2/2023	The time of news on the Kultura TV channel, Egor Bidulya is in the studio. Hello. With hope for the best. Somehow give hope that there are some such people, or there were, or there will be. The theater on Taganka opens a new season with the premiere of the show The Harbour. Love through songs. I already knew that I would now write for her. The composer Alexander Kolker has passed away. He was 90. We enlighten to entertain. There are such wide-angle cameras, and the dinosaurs seem to poke right into the lens. What is the phenomenon of the popularity of the series The Prehistoric Planet?
2	Kultura	Placebo, Rossiya +Kultura	8/4/2023	News on Kultura TV, Egor Bidulya is in the studio. Hello. The premieres of the "Experiments" tour. A very interesting project on Slavic mythology in combination with Japanese practices. The theater of Roman Viktyuk is ready for the opening of a new season. The architecture of light. They helped to illuminate previously unilluminated rooms, such as corridors, bathrooms, rooms. In St. Petersburg, the traditions of the production of glass bricks in Alkanye are revived. Researcher of the pre-Columbus America. Many of his research is still used by scientists both in Peru and around the world. In the Darwin Museum, they opened the exhibition "The invariants of the evolution of culture. Peru. Russia."
2	Kultura	Placebo	8/10/2023	Hello, it's time for the news on our channel, Elena Pahomova is in the studio, briefly about some topics of the broadcast. Tales of the Mountain King. This mystery is related to production. How Pavel Bazhov created the mythology of the Urals? They tell us in the Museum of the Silver Age. But our music remains. This is the source code. This is where all the work of Mercury came from. Thousands of Freddie Mercury's personal items can be seen in the anticipation of a large auction. A cocoon of tradition. It can't leave anyone indifferent. The Russian Ethnographic Museum presents the Silk Road through samples of fabric art.
2	Kultura	Placebo	8/16/2023	Hello! It's time for news on our channel, Lada Aristarkhova is in the studio. Briefly about some topics of the broadcast. Now shorter is longer. To call a festival young today in its pure form can only be shortened. Festival of debut cinema in Leningrad combined both short and full-length movies in the program. City in the city. A complex of work that requires thoughtful approach. Museum-theatrical quarter is being build in Moscow on the territory of Bakhrushinskaya estate. Make an effort to turn around. We tried to hear it in our own way, with our ears and hearts of today. The Red Torch brought from Novosibirsk to the Gorky Plus festival the play "The Bourgeoisie". Dance with pipes. The team of the project prepared something unique. The night of the Factories in Chelyabinsk was held in the workshop "Height 239."
2	Kultura	Placebo, Rossiya +Kultura	8/17/2023	Hello! It's time for the news on our channel, Lada Aristarkhova is in the studio. Briefly about some topics of the broadcast. A musical guide of Russia. It's not so easy to tell what kind of miracle it is. Yuri Bashmet made an excursion through the Moscow conservatory in support of the RGO action. The Russian New Wave. Our life is, by and large, funny, if we don't fall into suffering. The first full-length debut movies were presented at the film festival in Kaliningrad. About liberators and conquerors. The Easter egg will become a meaningful emphasis. The exhibits of the museums of the Moscow Kremlin will be shown at two exhibitions in the Far East. The flight over the Aldama. The knowledge of common features of different species helps to understand the ecosystem. Arctic birds settled in the subtropical range of the pharmacy garden.
2	Kultura	Placebo, Rossiya +Kultura	8/18/2023	Hello! It's time for the news on our channel, Lada Aristarkhova is in the studio. Briefly about some topics of the broadcast. The ratio of beauty and benefit. There was no such space before. The Petersburg conservatory is expanding in the process of reconstruction. The architects of the worlds. It's a big documentary that communicates with the audience. The festival "Shorter" in Kaliningrad is dedicated to the masters of the past and the future. What do you have in your name? For us, this is a kind of standard on which we want to focus. We need a Dyagilev, say they young artists in the project of the Kupol Gallery. Ah, Shapito, Shapito! Gorky Land combined the works of writers and the circus traditions of the past.
2	RTVI	Rossiia +RTVI	8/4/2023	Alexei Navalny was sentenced to 19 years in prison. He will be sent to a correctional institution with the strictest conditions. Alexander Pavlov will tell you how the process went. Europe at this time urges to free Navalny and reminds the Kremlin of the investigation into the poisoning of the opposition. How the sentence was assessed by Western politicians and Russians, Navalny's supporters who left the country. The European correspondent for RTVI Andrey Yezhov will tell you about it. Unmanned aircraft attacked a naval base in Novorossiysk. Military intelligence reports about a damaged large landing ship. Lithuania annuls the visa for the residence of more than a thousand citizens of Russia and Belarus. In Georgia, a mourning ceremony was announced after the end of the largest landslide in the last 30 years. The dollar is 96, the euro is 100. The currency exchange rate in Russia is breaking new records. Mutineers in Niger are breaking military agreements with France. The overthrown president asks the United States for protection from PMC Wagner. The Republicans will not vote for Trump if he is found guilty of the attack on the Capitol. What are the chances of politics in a new court battle?
2	RTVI	Rossiia +RTVI	8/17/2023	The counter-offensive is moving forward. Ukraine claims that the Armed Forces of Ukraine have settled in the village of Urazhaine in the Donetsk region. A large attack on Golos. Russian security forces came with searches to the members of the independent movement to monitor the elections. Air disaster in Malaysia. The plane fell directly onto the suburban highway. It is necessary to remove the blockade immediately. In a UN conference, they talked about the crisis in Nagorno-Karabakh. The supporters of independent Catalonia helped to elect the speaker of the lower chamber of the Spanish parliament. Madrid has become even closer to the formation of a coalition government. What concessions are now expected in Barcelona? The European correspondent Andrey Yezhov will tell you about this very soon in the Big Newstalk. Dozens of victims of the rains in India. People are dying from floods and landslides. The ruble celebrated the anniversary of the default by strengthening. 25 years ago came the most difficult day for the economy of modern Russia.

2	RTVI	Rossiya +RTVI	8/18/2023	The drone attack and evacuation. The center of Moscow is again in the zone of increased risk. In the US Congress, they argue about the success of the counter-offensive of the Armed Forces of Ukraine. Ukraine is again under shelling. The officials of Chechnya approved the news of the beating of the person detained for the burning of the Quran by the son of Ramzan Kadyrov. The co-chairman of the Golos movement, designated a foreign agent, has been arrested on the charges of participating in an undesirable organization. Foreign agents in the Duma. The number of deputies with such a status in the Moscow parliament is growing. These are the deputies who criticize the authorities. Alexander Pavlov reports on the foreign agent status and its consequences. The south of Germany is flooded after heavy rains. Bavaria is among the most affected regions. Whole streets have gone under water. European correspondent Andrey Yezhov reports on the damage caused by the bad weather.
2	Rossiya-1	Rossiya +RTVI, Rossiya +Kultura	8/4/2023	On the channel "Russia," it's time for the main news of the day. Igor Kozhevnikov is in the studio, hello. The equipment is not new and without spare parts. The first results of the Ukrainian counter-offensive. Losses in two months - more than 43,000 soldiers. A legitimate question from the West: If they can't do it now, how can they do it in the future? The artilleryman has received the coordinates of the target. Kalibr is a formidable weapon. Our military reports on today's situation on the fronts. A big event for Donetsk. The pressure is great, water is coming. Specialists of the Ministry of Defense have broken through the water blockade that Kiev has set up. The Sivers'kyi Donets'-Donbas Channel is full. A year ago, the situation here was devastating. The IAEA mission is convinced that Russia has not mined the Zaporizhzhia Air Force. Ukraine is lying. These people lie like they breathe. Everything you need to know about Biden. If you can't defeat such a person, you will persecute him. The third criminal case in four months. Biden can't allow Trump become president, otherwise he will go to prison with his son. Hunter Biden sat next to his father and threatened his partner. Transfer the money or my father will show you. The town of Krasnodar. The strongest landslide in Georgia. Our correspondents are working on the spot.
2	Rossiya-1	Rossiya +RTVI, Rossiya +Kultura	8/17/2023	On the TV channel Russia, Bolshie Vesti, in the studio is Yevgeny Rozhkov. Hello. The whole information picture of this Thursday in our broadcast. New transport artery. "Allow me to start the movement. I allow." The third Moscow central diameter was connected with Zelenograd and Ramenskoye. Thousands of residents of Moscow and the Moscow region have already felt the difference. "Now it will be more accessible to us, faster. Do you know how much we were waiting? The more trains, the better." Vladimir Putin talked about the plans to launch super-speed railways. The time on the way for passengers will decrease from today's 4.05 to 2.15 between St. Petersburg and Moscow. And also to the Urals, the Black Sea coast, and to Belarus. The destruction of the Ukrainian echelon with ammunition in the Dnepropetrovsk region. The militants themselves are laying out how NATO equipment is being blown up. Our military correspondents report on the battles on different frontlines of the special operation of our military corps. Fuel tankers are approaching as close to the firing positions as possible. Each firing position is very well equipped. The owner of the saltpeter warehouse that exploded in Makhachkala was arrested in the capital Basman court. How is the investigation going in Dagestan? But the CIA warned that the counter-offensive will not work. Seymour Hersh reveals new secrets. Zelensky organized a show, and Washington believed. Protests began in American Hawaii. "I'm local, we want to know the truth. Why did almost the entire resort burn down so quickly?" And where is Biden?
2	Rossiya-1	Rossiya +RTVI, Rossiya +Kultura	8/18/2023	On the TV channel Russia-1, it's Big Vesti, Evgeny Rozhkov is in the studio. Hello, the whole information picture of this Friday is in our broadcast. Dozens of guns are shot down. American, British, Polish. There is a real hunt for German Leopards. Western technology does not survive here long. The praised Leopards, they are here like shaggy cats. Mikhail Fedotov about how our military throw away Ukrainian militants under Rabotino, and Maxim Akhmetov reports from the strategic Vremia area. Malka is a very powerful and formidable gun caliber 203 millimeters. Stanislav Nazarov from Donetsk where cassette ammunition is blown up in the yard. It's a fragment of a cassette-type ammunition. The United States approved the supply of F-16 to Ukraine. There are no more obstacles for the transfer of aircraft, but after the preparation of Ukrainian pilots, the process has stalled. Everything is complicated because of their lack of knowledge of English. In the States, they doubt that new weapons will help. The CIA does not see the prospects of the counteroffensive. Trump is frightened by Biden. What is happening with Joe Biden is madness. This guy will lead us to nuclear war. Lithuania closed two KPP on the border with Belarus. It should be, I quote the Lithuanian authorities, inconvenient to go to Belarus.
3	Kultura	Placebo, Rossiya +Kultura	8/29/2023	It's time for the news on the Kultura TV channel, Egor Bidulya is in the studio. Hello! Musical declaration of love. The musical festival "Hibla-Gerzmava is invited" takes place in Abkhazia. Is it a hoax or a satirical clownery? I was just collecting texts that somehow touch me. A play by the young director Andrey Stadnikov was shown in the "Inside" theater. A myth writer. Oleg Nikolaevich, of course, wore a mask of a freak. Oleg Karabaychuk, poorly understood by the world. A new biography about the genius composer. Family meetings. To come to my historical homeland, to meet my people. The International Ethnocultural Festival of the Seto people took place in the Pskov region.
3	Kultura	Placebo	8/30/2023	It's time for the news on the TV channel Kultura, Egor Bidulya in the studio. Hello. Talking simply about complex topics. He had the Russian pain inside. He thought about how to protect it. In Moscow, they said goodbye to the director Gleb Panfilov. For the devotion to his mission. To reintroduce people of one direction to each other. The award in the name of Sergei Puskepalis will be awarded at the Volkhov Theater at the end of September. The work of the architect Nikolai Lvov. This is a greater help from the Foundation of Presidential Grants. And you see, the site has already been built. In the village of Pereslegino in the Tver region, the temple of Peter and Paul is being revived. One for adults, another for children. This year, our colleagues from Georgia also joined us. Two Moscow international book fairs opened at once.
3	Kultura	Placebo, Rossiya +Kultura	8/31/2023	On the Culture channel, it's time for news, Egor Bidulya in the studio. Hello. Films about the environment. A lot of students, schoolchildren are interested in the festival's program. The 3rd international film festival "A Form of Life" opened in Perm. Van Gogh, Degas and Monet in Omsk. An impressionist class discovers an incredible wealth of color. In the center of the Hermitage of Siberia, the exhibition "Conservatives and Rebels" opens. A bet on young directors. On the small stage, there will be a play based on the film scenario by Shpalikov, "A long happy life." Sergei Zhenovach announced the plans of the Theater Art Studio for the new season. Very careful selection, maximum 15 will be admitted. In the Mikhalkov Academy, it is the final stage of the entrance exams.

3	Kultura	Placebo	9/1/2023	The time of the news is on the Kultura TV channel, Egor Bidulya in the studio. Hello! Happy New School Year! Hooray! On September 1, the Day of Knowledge is celebrated annually in Russia. The connection of the object with nature. Sometimes the object finds itself and you adjust to it. Vertical position in the Museum and Exhibition Center Rosyzo. All for the sake of a successful shot. We had to get through the dense jungle. Different forms of life are studied and shown at the Dokkino festival in Burma. Return to the TV screens. An amazing celebration awaits, as always. What will the audience see in the first issue of the new season of Big and Small?
3	Kultura	Placebo, Rossiya +Kultura	9/6/2023	Hello, it's time for the news on our channel, Lada Aristarkhova is in the studio. Briefly about some topics of the broadcast. To the new borders. This season I want to dive somewhere deep. The new chief director of the Vakhtang Theater, Anatoliy Shuliev, announced the plans for the season. The connecting thread. To drive through Transsib and join this great miracle. Krasnoyarsk, the new point of the federal tourist project, "The Emperor's Route." Choreographic opera. The body should also feel the music. The premiere of Carmen in the Mikhailovsky Theater Nacho Duato turned to a new genre. A strict selection. Without humor and self-irony. Nikita Mikhalkov handed out student IDs to the trainees of his academy workshops.
3	Kultura	Placebo	9/7/2023	Hello, it's time for the news on our channel, Lada Aristarkhova is in the studio. Briefly, about some topics of the broadcast. The city is a fortress. Very strict requirements apply to each object. The Vologda Kremlin should be completely restored in 4 years. Heroes of their time. Now it's probably time to try and search, search for a non-dead theater. The problems of personality and the epoch will become the main theme of the new season of the Theater of Nations. An almanac in poetry. This is unusual, not only for the audience, but also for the actors, for everyone, for us. The premiere of the film "It happens among people" in the Khudozhestvennyy movie theater. Behind the scenes. I want this to be immediate. Soon, there was a wedding. Uncle's Dream in Gogol's Theater became the story of female loneliness.
3	RTVI	Rossiia +RTVI	8/29/2023	The funeral of Yevgeny Prigozhin took place in St. Petersburg in a closed format. The information about where and when they will say goodbye to the head of the PMC was hidden until the last moment. Forbidden but not forgiven. The families of the victims of the prisoners recruited by the PMC Wagner are trying to understand where the former criminals are now. Yevgeny Prigozhin said in June that the contract service with the "musicians" was completed by 30,000 people. Tatiana Bour found out what victims think about such justice and their own safety. Ukrainian authorities reported on the counter-offensive in the Zaporozhye region. Western regions of Russia were attacked by drones. The main news of the 552nd day of hostilities in Ukraine. The scenario of total isolation of Belarus from European neighbors is becoming more and more realistic. Lithuania, Latvia and Poland have declared their readiness to completely close the borders. The country that, as it is claimed, hosts the PMC Wagner mercenaries, is causing even more caution in the Baltic States and Poland. Under what conditions will the passpoints stop working and what will Belarusians who are used to traveling to Europe have to do? I will tell you about the initiatives of the neighbors of the Lukashenko regime from Poland; in the Big Newstalk, the European correspondent Andrey Yezhov. The court in Pakistan. The country's former prime minister has suspended the scandalous sentence. British airports have paused due to a technical failure of the dispatchers. These and other news in the Big Newstalk.
3	RTVI	Rossiia +RTVI	8/31/2023	2 Ukrainian helicopters crashed under Bakhmut, another drone was shot down in the Moscow region. The main news of the 554th day of hostilities in Ukraine. The Estonian authorities talk about the recent strikes of drones on the airfield in Russian Pskov, a few kilometers from their border. The prospect of sanctions for the leaders of the military coup in Niger. Germany insists on unlocking the Lachin Corridor. The situation there, the politicians say, is catastrophic. Andrey Yezhov will soon tally up the results of the summit of European diplomats and military in the Big Newstalk. President of Nagorno-Karabakh replaced the head of the government and himself resigns. The trucks with humanitarian aid, meanwhile, still cannot overcome the blockade. Since 2025, 3,000 streets and settlements will be renamed in Kazakhstan. Why is this so disturbing to the Russian authorities? I, Arseniy Molchanov, will tell you. Ben Wallace left the post of Minister of Defense in Great Britain. How will the world remember the British captain, and will he be able to lead NATO? The NDRC has practiced nuclear strikes at South Korea. A blue super moon has risen above the planet. These and other news in the Big Newstalk.
3	RTVI	Rossiia +RTVI	9/6/2023	16 people were killed, dozens were injured. Konstantinovka in the Donetsk region was hit by a missile strike. Kiev again survived a night attack. Main news of the 560th day of hostilities in Ukraine. 22 years in prison for the assault on the capital. The American court sentenced the leader of the right-wing radical group Proud Boys Enrique Tarrio. Armenia will conduct joint military exercises with the United States. Who is closer to Yerevan today? Moscow or Washington? German Chancellor is criticized from both sides. The conservatives are sure that Scholz underestimates the scale and future consequences of military actions in Ukraine. And the right-wing populists are scolding the government for sanctions against the Kremlin and calling for the coalition to resign. Andrey Yezhov followed the hot debates around the budget project of Germany for the next year for the whole day in Berlin today. Istanbul is flooded. Rainfalls caused the strongest flooding. There are those who died. The United States conducted a test launch of an intercontinental ballistic missile. On the coast of Australia, sailors were saved who were attacked by sharks. These and other news in the Big Newstalk.
3	Rossiia-1	Rossiia +RTVI, Rossiia +Kultura	8/29/2023	Having failed the counter-offensive, Ukraine strikes the civilians. A shelling of Gorlovka. Three men died due to artillery shelling. Several people died in the Bryansk region. Ukraine and Poland are outraged. The pope made a new scandalous speech, talking about the greatness of Russia. He can't sleep because he loves Peter the Great. Pope didn't get approval for his speech from Kiev. "You are the heirs of the Great Mother Russia. Go ahead with this." 54 minutes. The flight is normal. The flight was 5 minutes long. 40 more Superjet systems are now domestic. Pushkin, Lermontov and Gogol were not needed to pass the USE exam. A shift in education has begun, but not everyone wants it. "This is a wrong decision. Of course, it's unnatural." An unexpected discussion on the eve of the academic year. Primorye is flooded again. The resort areas are also under water. There is simply no bridge. How will people drive?

3	Rossiya-1	Rossiya +RTVI, Rossiya +Kultura	8/31/2023	Alexey Baranov about the situation in the Kupyansk direction. "We are performing a combat task, we see the fleeing enemy." Mikhail Fedotov about the hottest line now, Verbovaya-Rabotino. The personnel of the enemy is dying out, and their reserves are not endless. The banks of the Yenisei have become closer. "I wanted to ask you to allow the movement along the bridge over the Yenisei River. I allow." A truly long-awaited event. Report from the ground. Britain has replaced the Minister of Defense. "We have a new Minister of Defense who knows very little about defense." The President of Georgia was banned from going abroad. The United States was ordered to protect Western weapons, not Ukrainians. Kiev obeyed. "The process of mobilization is what ensures our victory." Ukraine begins to draft disabled people. It can be about tens of thousands. Ukrainians are running. "Friend, don't run. Don't run. Good night. Where are we going?" What will be new in the new academic year? Each subject has one textbook. Labor education is coming back. The silver medal is coming back. And where did Pushkin, Lermontov and Gogol disappear from the USE exam?
3	Rossiya-1	Rossiya +RTVI, Rossiya +Kultura	9/6/2023	What air are we breathing and will be breathing? How many dangerous objects are still operational and when will they be closed? What important deposits are being prepared for development? And why are ecotourism booms waiting in Russia? What the President discussed with the head of the Ministry of Natural Resources. High-precision weapon strikes on the objects of the enemy's infrastructure, again Izmail and Rani. The Dunai port of Kiliya is on fire. The oil storage facility and the base for the preparation of sabotage groups have been destroyed. Blinken in Kiev after visiting the military cemetery was satisfied with the results of the offensive. "We see good progress in counter-offensive, which is very pleasing." The Ukrainians who managed to leave for Europe began to receive "letters of happiness." "It says that in two weeks I should leave the European Union." Mrs. Harris, why didn't President Biden come? The correspondent of Vesti tried to ask the question to the Vice President of America at the ASEAN summit in Indonesia. How is Sergei Lavrov welcomed. Biden, despite Covid, without a mask, gave an award to an American veteran, and then he went somewhere. The last shots before the disaster. An international expedition in the Pacific Ocean was attacked by sharks. This is how the crew was miraculously saved. Transfer from the plane to the subway. The Vnukovo airport became the first in the country to have its own subway station. Now it's a stable 40 minute ride to the center of Moscow.

B Additional Results

B.1 Tables with Main Results

This section presents the regression tables for the main results of the paper. The tables summarize the ITT effects of the two treatment arms on the outcomes of interest, as described in Appendix A.4.

Table B1: ITT effects on news consumption and news awareness.

	Used last week:				News awareness:		Behavior:
	Rossiia-1	Share of state outlets	RTVI	Share of independent outlets	Pro-government	Critical	Prefer Rossiia-1 over RTVI
Rossiia+Kultura	0.065** [0.030]	-0.017 [0.013]	-0.018 [0.019]	-0.006 [0.011]	0.043** [0.019]	0.042** [0.017]	-0.044* [0.024]
Rossiia+RTVI	0.048 [0.031]	-0.011 [0.013]	0.122*** [0.025]	0.011 [0.011]	0.034* [0.018]	0.026 [0.017]	-0.097*** [0.026]
Control mean	0.720	0.247	0.086	0.069	0.340	0.215	0.895
Observations	1175	1175	1175	1175	1175	1175	1176

Note: Dependent variables are measured at endline only (Wave 4). Benchmark: Control condition (“Kultura”). HC2 standard errors in brackets. “Rossiia+Kultura” row reports the effects of the pro-government media condition, while “Rossiia+RTVI” row reports the effects of the pro-government vs. independent media condition. “Prefer Rossiia-1 over RTVI” is an indicator of whether respondents chose to watch a news segment from Rossiia-1 over an RTVI news segment for an additional task in the endline survey, as described in the text.

Table B2: ITT effects on approval of authorities and evaluation of government’s policies.

	Authorities approval	Quality of public services	Ukraine concern
Rossiia+Kultura	-0.141** [0.067]	-0.071 [0.060]	0.089* [0.047]
Rossiia+RTVI	-0.101 [0.065]	-0.121** [0.060]	0.058 [0.045]
Control mean	-0.001	0.001	-0.002
Observations	1164	1164	1165

Note: Dependent variables are measured at endline only (Wave 4). Benchmark: Control condition (“Kultura”). HC2 standard errors in brackets. “Rossiia+Kultura” row reports the effects of the pro-government media condition, while “Rossiia+RTVI” row reports the effects of the pro-government vs. independent media condition. “Authorities approval” is the index of approval of government officials (president, federal government, regional governor) and the United Russia party, “Service quality” is the index of satisfaction with six key public policies, and “Ukraine concern” is the index of five questions measuring the concern about the war in Ukraine and its long-term impact on Russia.

Table B3: ITT effects on the knowledge of political reporting patterns.

	Rossiia-1 covers:		RTVI covers:		Correctly identified:
	Domestic positive	Foreign negative	Domestic positive	Foreign negative	Rossiia-1 or RTVI
Rossiia+Kultura	0.023* [0.014]	0.038** [0.017]	0.039* [0.023]	0.011 [0.022]	0.040*** [0.015]
Rossiia+RTVI	0.019 [0.014]	0.023 [0.017]	0.066*** [0.023]	0.087*** [0.021]	0.058*** [0.015]
Control mean	0.908	0.843	0.473	0.618	0.669
Observations	1170	1173	1171	1171	1176

Note: Dependent variables are measured at endline only (Wave 4). Benchmark: Control condition (“Kultura”). HC2 standard errors in brackets. “Rossiia+Kultura” row reports the effects of the pro-government media condition, while “Rossiia+RTVI” row reports the effects of the pro-government vs. independent media condition.

Table B4: ITT effects on the perceptions of media bias.

	Rossiia-1 is unbiased/independent	RTVI is unbiased/independent
Rossiia+Kultura	0.001 [0.020]	-0.021 [0.016]
Rossiia+RTVI	-0.007 [0.020]	0.025* [0.015]
Control mean	0.433	0.561
Observations	1164	1163

Note: Dependent variables are measured at endline only (Wave 4). Benchmark: Control condition (“Kultura”). HC2 standard errors in brackets. “Rossiia+Kultura” row reports the effects of the pro-government media condition, while “Rossiia+RTVI” row reports the effects of the pro-government vs. independent media condition.

B.2 Positive and Negative Mentions in Content Analysis Tasks

To demonstrate that the participants noticed the differences in political reporting patterns between media outlets, we examine their responses to content analysis questions at the individual news video level. The content analysis tasks asked respondents to count how often news headline segments mentioned situation in Russia, Russian federal authorities, and foreign countries positively or negatively. Outcomes are the differences between the number of positive and negative mentions of each topic with respect to each video.

We estimate the following regression model: $Y = \alpha + \beta X + \varepsilon$, where Y represents the sentiment of the video, and X is an indicator for whether the specific broadcast was aired by the state-owned TV station. The coefficient β estimates the difference in sentiment between state-owned media’s coverage and that of the benchmark media (either non-political or independent). We employ clustered CR2 standard errors at the participant level to calculate p -values for the tests of interest, using the parametric implementation available in the `estimatr` package in R. We focus on the estimates of β , pooling the data from the first three waves for one of the treatment conditions (either *Rossiia+Kultura* or *Rossiia+RTVI*). Table B5 and Table B6 report these regression results. The row “Hypotheses” here and below reflects the calculation of p -values: two refers to two-tailed tests, while *lwr* and *upr* refer to one-tailed tests of negative and positive differences, respectively. “Control mean” reports the mean value of the outcome variable in the reference group.

Table B5: Average differences in video topic sentiment between Rossiia-1 and Kultura.

	Situation in Russia	Federal authorities	Other countries
Rossiia-1	-1.042*** [0.064]	0.481*** [0.016]	-1.320*** [0.079]
Control mean	2.792	0.068	0.292
Observations	8638	8638	8638

Note: The dependent variable in each column is the difference between positive and negative topic mentions. The sample includes evaluations of videos from all waves with tasks (Waves 1–3) by participants assigned to Rossiia+Kultura group. Benchmark: Kultura video evaluations. CR2 standard errors in brackets are clustered at the participant level.

Table B6: Average differences in video topic sentiment between Rossiia-1 and RTVI.

	Situation in Russia	Federal authorities	Other countries
Rossiia-1	1.452*** [0.049]	0.400*** [0.016]	-0.458*** [0.045]
Control mean	0.153	0.196	-0.567
Observations	8164	8164	8164

Note: The dependent variable in each column is the difference between positive and negative topic mentions. The sample includes evaluations of videos from all waves with tasks (Waves 1–3) by participants assigned to Rossiia+RTVI group. Benchmark: RTVI video evaluations. CR2 standard errors in brackets are clustered at the participant level.

Table B5, which examines the *Rossiya+Kultura* condition, shows that in line with our expectations, participants who analyzed state media headlines reported more positive than negative mentions of Russia and Russian authorities. The coefficient for state-owned media is negative, which means that the difference was smaller for Rossiya-1 segments, compared to Kultura segments. Yet, the difference was still substantial: for Kultura videos, participants on average reported 2.8 more positive than negative mentions, and for Rossiya-1 videos, they reported about 1.8 more positive than negative mentions. As Table B7 below demonstrates, participants who watched state-owned media in either *Rossiya+Kultura* or *Rossiya+RTVI* treatment arm counted almost three times more positive than negative mentions of the situation in Russia. Similarly, as expected, participants observed a more positive coverage of Russian authorities and a more negative coverage of other countries in Rossiya-1 videos, compared to Kultura.¹¹

Table B6 examines the observed differences in the coverage of Rossiya-1 and RTVI. Again, we find that participants noticed substantially more positive than negative mentions of Russia and Russian authorities in Rossiya-1 videos than in RTVI segments, and they noticed that Rossiya-1 covered other countries more negatively. Across all three dimensions, the reported differences in positive and negative mentions were closer to zero for RTVI, which means that the participants saw the coverage by RTVI as more balanced. Tables B7 and B9 report the average count of positive and negative mentions of each topic by outlet and treatment arm and additional summary statistics.

Table B7: Average number of positive and negative mentions by treatment arm, channel, and topic

Experimental condition	Channel	Russia:		Federal authorities:		Other countries:	
		Positive	Negative	Positive	Negative	Positive	Negative
Placebo	Kultura	2.05	0.08	0.08	0.03	0.29	0.05
Rossiya+Kultura	Kultura	2.91	0.12	0.10	0.03	0.36	0.07
Rossiya+Kultura	Rossiya-1	2.77	1.02	0.63	0.09	1.28	2.30
Rossiya+RTVI	RTVI	1.21	1.05	0.35	0.15	1.88	2.45
Rossiya+RTVI	Rossiya-1	2.63	1.03	0.71	0.11	1.36	2.39

Note: Kultura videos in control group are restricted to those shown in the Rossiya+Kultura arm.

Table B8: Summary statistics for the evaluations of the quality and interestingness of news videos by TV channel

Experimental condition	Channel	Wave	Video evaluations	
			Interesting	Quality
Placebo	Kultura	1	3.98	4.17
Placebo	Kultura	2	4.36	4.48
Placebo	Kultura	3	4.37	4.50
Rossiya+Kultura	Kultura	1	3.97	4.17
Rossiya+Kultura	Kultura	2	4.30	4.39
Rossiya+Kultura	Kultura	3	4.29	4.42
Rossiya+Kultura	Rossiya-1	1	4.04	4.21
Rossiya+Kultura	Rossiya-1	2	4.18	4.33
Rossiya+Kultura	Rossiya-1	3	4.22	4.36
Rossiya+RTVI	RTVI	1	3.93	4.06
Rossiya+RTVI	RTVI	2	4.05	4.17
Rossiya+RTVI	RTVI	3	4.10	4.18
Rossiya+RTVI	Rossiya-1	1	4.03	4.16
Rossiya+RTVI	Rossiya-1	2	4.11	4.26
Rossiya+RTVI	Rossiya-1	3	4.17	4.26

¹¹ Respondents assessed Kultura's reporting of the situation in Russia as positive, which, in hindsight, is not surprising, as covering Russian cultural events can be seen as positive about Russia.

Table B9: Summary statistics for positive and negative mentions of specific topics by TV channel

Topic	Channel	Obs	Mean	SD	Min	p25	p50	p75	Max
Other countries: Negative	Kultura	8686	0.06	0.33	0	0	0	0	6
Other countries: Negative	RTVI	4082	2.45	1.82	0	1	2	4	10
Other countries: Negative	Rossiya-1	8401	2.34	1.86	0	1	2	3	10
Other countries: Positive	Kultura	8686	0.32	0.70	0	0	0	0	8
Other countries: Positive	RTVI	4082	1.88	1.75	0	0	2	3	9
Other countries: Positive	Rossiya-1	8401	1.32	1.60	0	0	1	2	9
Fed authorities: Negative	Kultura	8686	0.03	0.19	0	0	0	0	2
Fed authorities: Negative	RTVI	4082	0.15	0.43	0	0	0	0	3
Fed authorities: Negative	Rossiya-1	8401	0.10	0.37	0	0	0	0	3
Fed authorities: Positive	Kultura	8686	0.09	0.38	0	0	0	0	5
Fed authorities: Positive	RTVI	4082	0.35	0.69	0	0	0	1	5
Fed authorities: Positive	Rossiya-1	8401	0.67	0.84	0	0	0	1	5
Russia: Negative	Kultura	8686	0.10	0.44	0	0	0	0	5
Russia: Negative	RTVI	4082	1.05	1.14	0	0	1	2	6
Russia: Negative	Rossiya-1	8401	1.02	1.23	0	0	1	2	6
Russia: Positive	Kultura	8686	2.48	1.86	0	0	3	4	9
Russia: Positive	RTVI	4082	1.21	1.35	0	0	1	2	10
Russia: Positive	Rossiya-1	8401	2.70	1.74	0	1	2	4	10

B.3 Open-Ended Answers About TV Channel Preferences

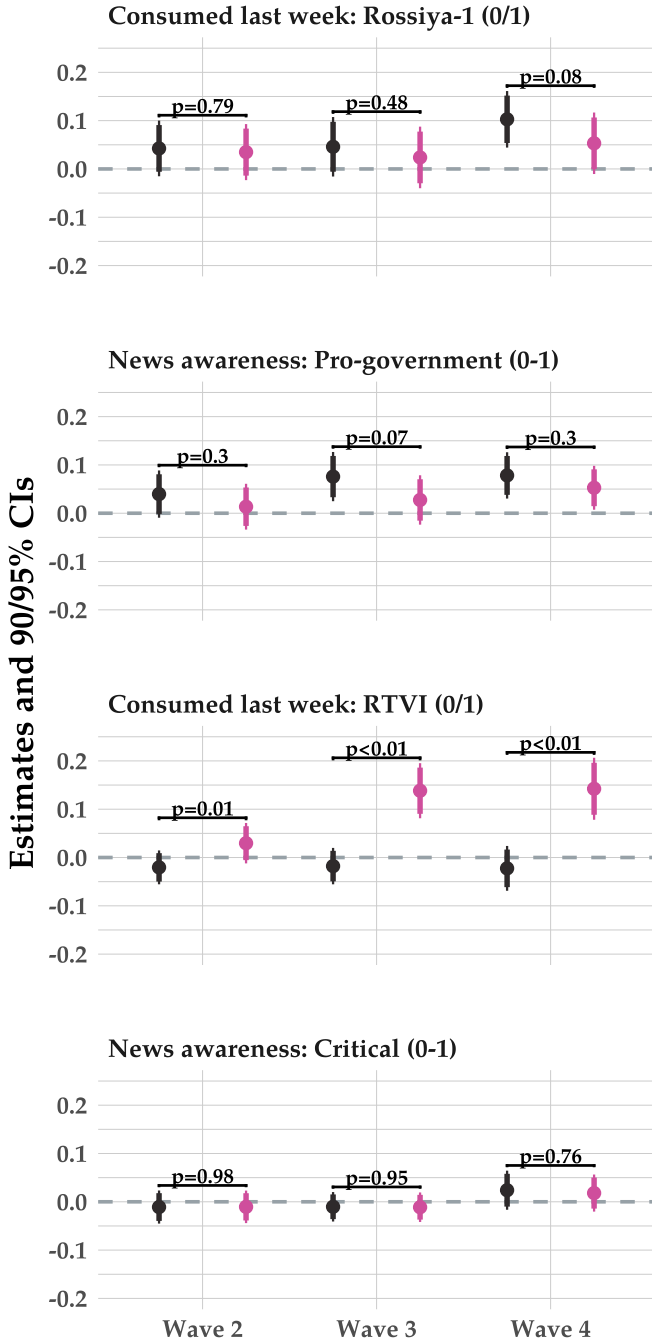
Table B10: Summary of open-ended answers about media outlet choice in endline survey

Channel	Experimental condition	Channel characteristics					
		Trustworthy	Less biased	Overall better	Curious	(Un)familiar	Official, Russian
RTVI	Placebo	0.11	0.18	0.20	0.18	0.07	0.00
RTVI	Rossiya+Kultura	0.04	0.21	0.12	0.40	0.00	0.00
RTVI	Rossiya+RTVI	0.12	0.38	0.07	0.14	0.00	0.00
Rossiya-1	Placebo	0.20	0.01	0.04	0.00	0.55	0.02
Rossiya-1	Rossiya+Kultura	0.19	0.01	0.04	0.00	0.50	0.05
Rossiya-1	Rossiya+RTVI	0.18	0.02	0.06	0.00	0.54	0.04

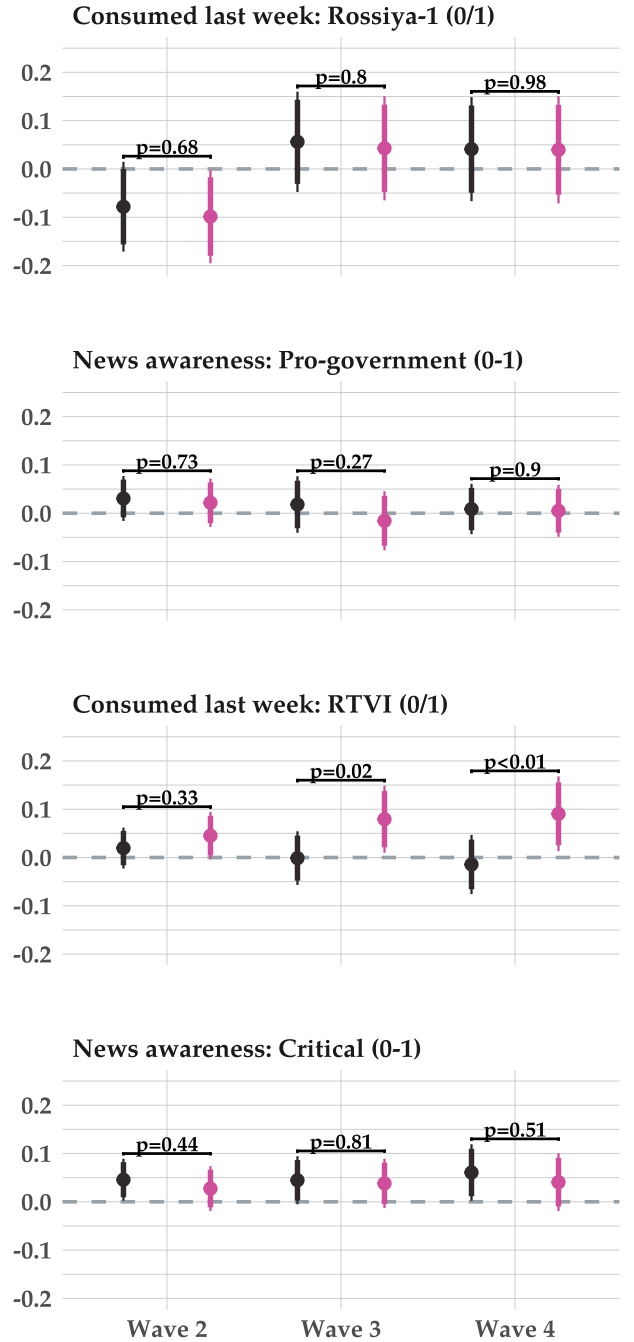
Note: The table reports the percentage of respondents in each treatment arm who explained their choice of Rossiya-1 or RTVI referring to the respective reasons for their choices. The analysis is based on the authors' coding of open-ended answers. 'Trustworthy' means that the channel was characterized as trustworthy and accurate overall. 'Less biased' means the channel was characterized as less biased, more independent, less propagandistic, etc. 'Overall better' means the channel was overall seen as higher-quality or liked better than the other channel. 'Curious' means the respondent wanted to consider a video of a channel because they knew little about it. '(Un)familiar' means that the channel was chosen because it was familiar, well-known, or easily accessible, or because the other channel was unknown to the respondent. 'Official, Russian' means that the channel was seen as an official, state-owned, or Russia-based media outlet.

B.4 Dynamic Changes in News Consumption

Support Putin



Do not support Putin



↑ Rossiya+RTVI ↓ Rossiya+Kultura

Figure B1: Heterogeneous effects by Putin support across survey waves.

Note: Benchmark is control (*Kultura*) condition. Color gradients show the sampling t -distribution. Dots represent point estimates $\hat{\tau}_S$ (black lines) and $\hat{\tau}_I$ (pink lines). Lines represent parametric confidence intervals. Brackets show p -values for a t -test of differences between the corresponding experimental groups. Survey wave indicated in parentheses for each outcome.

B.5 Pre-Registered Heterogeneity Analyses

In line with our pre-registration, we assess treatment effect heterogeneity based on participants' baseline beliefs and media consumption. We pre-registered the following three hypotheses related to effect heterogeneity.

First, citizens who regularly consume state media but not independent media at baseline should be less likely to change their beliefs about the political agenda of state media as a result of evaluating only state media (not independent media) news reports. Consequently, they should be less likely to alter their media consumption habits and political views as a result of such evaluations. Moreover, citizens who consume both state and independent media should be less likely to change their beliefs about the political agenda of either type of media after evaluating their respective news reports.

Second, if citizens already hold extreme beliefs—either that state media is highly biased or completely unbiased—they should be less likely to change these beliefs as a result of evaluating news reports. This hypothesis reflects the idea that strong beliefs should have been formed through prior evaluations of media content.

Table B11: Effect heterogeneity by prior media usage

	Rossiya-1 coverage:		RTVI coverage:		News quiz: Rossiya-1 or RTVI	Perceived media unbiasedness:		Consumed last week:		News awareness:		Behavioral measure: Prefer Rossiya-1 over RTVI	Indices of political attitudes:		
	Domestic positive	Foreign negative	Domestic positive	Foreign negative		Rossiya-1	RTVI	Rossia-1	RTVI	Pro-government	Critical		Authorities approval	Quality of public services	Ukraine concern
Rossiya+Kultura	-0.204	-0.251	-0.133	-0.134	0.059	-0.126**	-0.093	0.038	0.019	0.467	-0.029	-0.390***	-0.257	-0.025	0.131
	[0.216]	[0.283]	[0.218]	[0.254]	[0.055]	[0.059]	[0.060]	[0.117]	[0.056]	[0.333]	[0.363]	[0.130]	[0.253]	[0.222]	[0.234]
Rossiya+RTVI	0.010	0.114	0.065	0.350	0.106**	-0.051	-0.039	-0.033	-0.029	0.371	-0.195	-0.271*	-0.011	-0.037	-0.012
	[0.120]	[0.218]	[0.295]	[0.219]	[0.052]	[0.072]	[0.061]	[0.113]	[0.029]	[0.360]	[0.359]	[0.141]	[0.278]	[0.283]	[0.203]
Rossiya+Kultura x State only	0.241	0.359	0.285	0.185	-0.014	0.144**	0.065	0.029	-0.014	-0.162	0.261	0.363***	0.196	0.002	-0.106
	[0.221]	[0.290]	[0.234]	[0.267]	[0.058]	[0.064]	[0.062]	[0.122]	[0.058]	[0.358]	[0.379]	[0.132]	[0.262]	[0.233]	[0.239]
Rossiya+RTVI x State only	-0.007	-0.083	0.159	-0.004	-0.056	0.054	0.062	0.098	0.147***	-0.102	0.395	0.225	-0.047	-0.073	0.072
	[0.129]	[0.227]	[0.308]	[0.233]	[0.056]	[0.076]	[0.064]	[0.118]	[0.038]	[0.383]	[0.375]	[0.143]	[0.287]	[0.291]	[0.209]
Rossiya+Kultura x Independent only	0.530	0.440	-0.178	0.203	0.020	0.160*	0.133	-0.061	-0.186	-0.118	0.180	0.390*	0.461	0.175	-0.330
	[0.365]	[0.429]	[0.368]	[0.405]	[0.098]	[0.084]	[0.121]	[0.198]	[0.125]	[0.456]	[0.813]	[0.227]	[0.291]	[0.339]	[0.271]
Rossiya+RTVI x Independent only	0.193	0.302	0.066	-0.100	0.021	0.098	0.113	-0.217	-0.067	-0.348	0.886	-0.086	0.013	-0.111	-0.143
	[0.378]	[0.361]	[0.434]	[0.393]	[0.095]	[0.103]	[0.133]	[0.173]	[0.136]	[0.509]	[0.879]	[0.228]	[0.300]	[0.378]	[0.254]
Rossiya+Kultura x State and independent	0.356	0.462	0.327	0.155	-0.060	0.110	0.108	0.022	-0.084	-0.497	0.365	0.388***	-0.118	-0.219	0.137
	[0.242]	[0.299]	[0.269]	[0.293]	[0.066]	[0.077]	[0.072]	[0.130]	[0.089]	[0.425]	[0.454]	[0.146]	[0.302]	[0.266]	[0.260]
Rossiya+RTVI x State and independent	0.163	-0.044	0.066	-0.403	-0.056	0.023	0.064	0.004	0.159**	-0.662	0.015	0.131	-0.235	-0.137	0.031
	[0.155]	[0.240]	[0.329]	[0.255]	[0.061]	[0.084]	[0.069]	[0.128]	[0.076]	[0.429]	[0.429]	[0.155]	[0.315]	[0.314]	[0.226]
Control mean	3.725	3.529	2.418	2.855	0.669	0.433	0.561	0.720	0.086	2.041	1.292	0.895	-0.001	0.001	-0.002
Observations	1167	1170	1168	1168	1173	1161	1160	1172	1172	1172	1172	1173	1161	1161	1162

Note: Outcomes are measured at endline only (Wave 4). Benchmark: Control condition ("Kultura"). HC2 standard errors in brackets.

Table B12: Effect heterogeneity by prior beliefs about media bias

	Rossiya-1 coverage:		RTVI coverage:		News quiz: Rossiya-1 or RTVI	Perceived media unbiasedness:		Consumed last week:		News awareness:		Behavioral measure: Prefer Rossiya-1 over RTVI	Indices of political attitudes:		
	Domestic positive	Foreign negative	Domestic positive	Foreign negative		Rossiya-1	RTVI	Rossia-1	RTVI	Pro-government	Critical		Authorities approval	Quality of public services	Ukraine concern
Rossiya+Kultura	-0.055	0.121	-0.180	-0.239	0.006	0.021	0.015	0.100*	-0.062	0.191	0.058	0.009	-0.064	-0.104	-0.027
	[0.082]	[0.141]	[0.220]	[0.225]	[0.044]	[0.050]	[0.042]	[0.054]	[0.056]	[0.332]	[0.257]	[0.049]	[0.132]	[0.159]	[0.098]
Rossiya+RTVI	0.003	-0.018	0.010	0.050	0.069	0.012	0.020	0.077	0.090	0.430	0.240	0.028	-0.073	-0.194	-0.113
	[0.071]	[0.152]	[0.215]	[0.201]	[0.042]	[0.050]	[0.039]	[0.059]	[0.075]	[0.290]	[0.255]	[0.045]	[0.122]	[0.153]	[0.103]
Rossiya+Kultura x Medium bias	0.150	0.011	0.358	0.301	0.046	-0.011	-0.017	-0.001	0.067	0.156	0.317	-0.044	-0.036	0.057	0.084
	[0.095]	[0.152]	[0.234]	[0.238]	[0.047]	[0.055]	[0.045]	[0.064]	[0.060]	[0.356]	[0.284]	[0.054]	[0.148]	[0.172]	[0.111]
Rossiya+RTVI x Medium bias	0.045	0.063	0.207	0.236	-0.022	-0.012	0.016	0.000	0.070	-0.162	-0.133	-0.111**	0.047	0.151	0.157
	[0.086]	[0.163]	[0.229]	[0.213]	[0.046]	[0.054]	[0.042]	[0.068]	[0.080]	[0.316]	[0.277]	[0.052]	[0.137]	[0.165]	[0.113]
Rossiya+Kultura x High bias	0.154	-0.030	0.288	0.371	-0.007	0.035	-0.108*	-0.074	-0.045	0.095	-0.434	0.008	0.110	0.210	0.063
	[0.162]	[0.222]	[0.284]	[0.288]	[0.060]	[0.074]	[0.063]	[0.106]	[0.082]	[0.444]	[0.418]	[0.101]	[0.230]	[0.227]	[0.169]
Rossiya+RTVI x High bias	0.170	0.307	0.278	0.279	0.027	-0.030	-0.034	-0.173	-0.148	-0.661	0.029	-0.278***	-0.286	-0.159	0.321*
	[0.159]	[0.224]	[0.291]	[0.270]	[0.059]	[0.074]	[0.065]	[0.114]	[0.102]	[0.411]	[0.446]	[0.106]	[0.211]	[0.224]	[0.175]
Control mean	3.725	3.529	2.418	2.855	0.669	0.433	0.561	0.720	0.086	2.041	1.292	0.895	-0.001	0.001	-0.002
Observations	1170	1173	1171	1171	1176	1164	1163	1175	1175	1175	1175	1176	1164	1164	1165

Note: Outcomes are measured at endline only (Wave 4). Benchmark: Control condition ("Kultura"). HC2 standard errors in brackets.

Table B13: Effect heterogeneity by prior demand for unbiased news

	Rossiya-1 coverage:		RTVI coverage:		News quiz:	Perceived media unbiasedness:		Consumed last week:		News awareness:		Behavioral measure:	Indices of political attitudes:		
	Domestic positive	Foreign negative	Domestic positive	Foreign negative	Rossiya-1 or RTVI	Rossiya-1	RTVI	Rossia-1	RTVI	Pro-government	Critical	Prefer Rossia-1 over RTVI	Authorities approval	Quality of public services	Ukraine concern
Rossiya+Kultura	0.054 [0.061]	0.143** [0.071]	0.155 [0.099]	0.109 [0.096]	0.069*** [0.020]	0.037 [0.027]	0.016 [0.021]	0.127*** [0.039]	-0.045* [0.025]	0.528*** [0.154]	0.204 [0.131]	-0.008 [0.025]	-0.045 [0.086]	-0.015 [0.085]	0.009 [0.060]
Rossiya+RTVI	0.075 [0.054]	0.027 [0.072]	0.227** [0.097]	0.295*** [0.091]	0.075*** [0.021]	0.011 [0.026]	0.041** [0.020]	0.067* [0.040]	0.101*** [0.034]	0.293** [0.145]	0.095 [0.122]	-0.056** [0.028]	-0.060 [0.082]	-0.145* [0.083]	0.045 [0.057]
Rossiya+Kultura x Demand for unbiased news	0.024 [0.085]	-0.059 [0.104]	-0.050 [0.137]	-0.157 [0.133]	-0.070** [0.029]	-0.057 [0.040]	-0.079** [0.031]	-0.106* [0.060]	0.051 [0.037]	-0.561** [0.227]	0.006 [0.209]	-0.048 [0.047]	-0.117 [0.130]	-0.073 [0.120]	0.112 [0.093]
Rossiya+RTVI x Demand for unbiased news	-0.042 [0.085]	0.086 [0.102]	-0.054 [0.139]	-0.080 [0.127]	-0.042 [0.030]	-0.037 [0.040]	-0.037 [0.030]	-0.037 [0.062]	0.044 [0.050]	-0.208 [0.222]	0.108 [0.205]	-0.081 [0.052]	-0.070 [0.128]	0.061 [0.119]	0.015 [0.090]
Control mean	3.725	3.529	2.418	2.855	0.669	0.433	0.561	0.720	0.086	2.041	1.292	0.895	-0.001	0.001	-0.002
Observations	1170	1173	1171	1171	1176	1164	1163	1175	1175	1175	1175	1176	1164	1164	1165

Note: Outcomes are measured at endline only (Wave 4). Benchmark: Control condition ("Kultura"). HC2 standard errors in brackets.

C Internal Validity

C.1 Placebo Control Effects

In this section, we examine the possibility that placebo control tasks (watching non-political news headlines) could affect the main outcomes of interest on their own. Observing such effects might inhibit our ability to attribute any differences between control and treatment arms' outcomes to the treatments.

We leverage the panel structure of our experiment to see whether control group outcomes change over time. We use a simple OLS specification and regress the outcomes of interest measured across all waves on a set of indicators for Waves 2 through 4, subsetting the sample to the control group.

Results reported in Table C1 suggest that there are occasional significant changes in viewership of Rossiya-1 and RTVI and perceptions of media bias across post-treatment waves of the study within placebo control group. While concerning, these changes are not systematic (i.e. we do not observe them consistently across post-treatment waves, and for bias perceptions, the sign is changed between the waves). Therefore, placebo control tasks were unlikely to substantially affect the treatment effects of interest.

Table C1: Do outcomes in the control group change in Waves 2-4 compared to baseline (Wave 1)?

	Used last week:				
	Rossiya-1	RTVI	State media use	Independent media use	Media in Russia unbiased
Wave 2	0.052** [0.026]	0.013 [0.011]	0.014 [0.011]	0.001 [0.009]	-0.026* [0.015]
Wave 3	0.028 [0.028]	0.019 [0.013]	0.012 [0.011]	0.004 [0.009]	-0.005 [0.016]
Wave 4	0.033 [0.028]	0.039*** [0.015]	0.015 [0.012]	0.010 [0.010]	0.030* [0.017]
Hypotheses	two	two	two	two	two
Control mean	0.680	0.035	0.232	0.060	0.530
Observations	2102	2102	2100	2100	2101

Note: Sample includes only responses from participants in control ("Kultura") group. Outcomes are measured across all waves. Benchmark: Kultura group participants at baseline. HC2 standard errors in brackets.

C.2 Attrition

Non-response in the study is defined as any Wave 1 respondent not filling out the survey in Waves 2–4 before the stopping rule for enrollment is triggered (as described above, the stopping rule was based on the desired sample size in each wave). We conduct three tests to assess whether attrition is related to treatment and potential outcomes.

First, we conduct a two-tailed unequal-variances t -test of the hypothesis that treatment does not affect the attrition rate in each of Waves 2–4 of the study. We conduct this test using randomization inference, by comparing the observed t -statistic to the distribution of t -statistics under random assignment of the treatment using the simple random assignment.

Second, we regress the attrition indicator on the treatment, a set of baseline covariates, and treatment-covariate interactions. We account for covariates measured in Wave 1 (prior to treatment assignment), including sociodemographic characteristics, indices for the main outcomes of interest measured at baseline, and duration statistics. We perform an F -test of the hypothesis that all the treatment-by-covariate interaction coefficients are zero. Again, we rely on randomization inference to conduct this test. Table C2 shows the results of the t - and F -tests of independence of attrition from treatment assignment. Given that only one out of 20 reported p -values is below pre-registered 0.05 significance

level, attrition is unlikely to be associated with treatment assignment conditional on covariates.¹²

Third, among the participants who completed study Waves 2 or 3, we identify a subset of respondents who did not complete at least one of the subsequent study waves, and we estimate the effect of the treatment on intermediary outcomes measured in either Wave 2 or Wave 3 across experimental groups conditional on participant participation in subsequent study waves. This exercise assesses whether there are differences in potential outcomes among respondents who continued to participate in the study and those who did not. In this test, we implicitly assume that the differences in potential outcomes among those who drop out of study and those who stay should manifest before respondents drop out, allowing us to estimate those potential differences. We conduct this test by estimating model Equation (2) and looking at treatment effects heterogeneity on media consumption, news awareness, and media bias attitudes with respect to post-Wave 2 or 3 attrition status. As suggested by the results in Table C3 and Table C4, we do not observe strong evidence for heterogeneity in treatment effects measured at midline between respondents who continued to participate in our study and those who did not. The only negative treatment effect heterogeneity with respect to stopping study participation that we observe is related to total state media consumption, suggesting that if anything, our sample under-represents participants who responded to our treatment by reducing their state media consumption.

Table C2: Is attrition associated with treatment assignment?

Outcome	<i>t</i> -test <i>p</i> -values			<i>F</i> -test <i>p</i> -value
	Rossiya+RTVI vs Placebo	Rossiya+RTVI vs Rossiya+Kultura	Placebo vs Rossiya+Kultura	
Missed Wave 2	0.371	0.981	0.360	0.018
Missed Wave 3	0.267	0.587	0.619	0.611
Missed Wave 4	0.796	0.794	0.578	0.427
Missed Any of Waves 2-4	0.750	0.828	0.541	0.399
Total Waves Missed	0.289	0.739	0.476	0.150

Note: Each *p*-value corresponds to separate test of independence of treatment assignment from attrition pattern we observe. Wave 4 missing indicator is equal to 1 for respondents who completed Wave 4 as part of double-sampling procedure. Covariates included in the model for the *F*-test are: Age, Female, Education, Income level, Employment status, News consumption frequency, Usage: Rossiya-1, Usage: RTVI, Usage: State media use, Usage: Independent media use, Media in Russia unbiased, Demand for unbiased news, Approval of authorities, Log(pre-treatment duration in minutes).

Table C3: Are there differences in effects between those who participate after Wave 2 and those who do not?

	Used last week:				News awareness:		
	Rossiya-1	RTVI	State media use	Independent media use	Pro- government	Critical	Media in Russia unbiased
Rossiya+Kultura	-0.022 [0.038]	-0.005 [0.019]	-0.030** [0.015]	-0.004 [0.013]	0.116 [0.157]	-0.017 [0.120]	-0.006 [0.024]
Rossiya+RTVI	-0.004 [0.038]	0.027 [0.022]	-0.017 [0.016]	-0.002 [0.012]	0.055 [0.153]	-0.021 [0.117]	0.002 [0.023]
Rossiya+Kultura x Missed wave 3 or 4	0.045 [0.064]	0.000 [0.028]	0.014 [0.025]	0.002 [0.022]	-0.033 [0.259]	0.115 [0.191]	0.001 [0.037]
Rossiya+RTVI x Missed wave 3 or 4	0.023 [0.064]	-0.010 [0.033]	-0.013 [0.025]	0.003 [0.021]	0.042 [0.262]	0.071 [0.198]	-0.040 [0.037]
Control mean	0.732	0.047	0.246	0.061	2.259	2.130	0.504
Observations	1256	1256	1255	1255	1257	1257	1257

Note: Outcomes are measured at midline Wave 2 only. Benchmark: Control condition (“Kultura”) participants who completed Wave 4. HC2 standard errors in brackets.

¹²Note that we observe evidence of a relationship between attrition and treatment by covariate interactions only in Wave 2, whereas the main results reported in the paper primarily rely on Wave 4. Nevertheless, we use the pre-registered double-sampling procedure to supplement the main estimates with worst-case bounds proposed by [Coppock et al. \(2017\)](#).

Table C4: Are there differences in effects between those who participate after Wave 3 and those who do not?

	Used last week:				News awareness:		
	Rossiya-1	RTVI	State media use	Independent media use	Pro-government	Critical	Media in Russia unbiased
Rossiya+Kultura	-0.022 [0.038]	-0.005 [0.019]	-0.030** [0.015]	-0.004 [0.013]	0.116 [0.157]	-0.017 [0.120]	-0.006 [0.024]
Rossiya+RTVI	-0.004 [0.038]	0.027 [0.022]	-0.017 [0.016]	-0.002 [0.012]	0.055 [0.153]	-0.021 [0.117]	0.002 [0.023]
Rossiya+Kultura x Missed wave 4	0.025 [0.111]	-0.025 [0.050]	-0.013 [0.048]	-0.019 [0.048]	0.295 [0.488]	0.403 [0.343]	0.015 [0.060]
Rossiya+RTVI x Missed wave 4	-0.021 [0.117]	0.039 [0.073]	-0.080* [0.044]	0.020 [0.047]	-0.421 [0.503]	0.216 [0.338]	-0.051 [0.070]
Control mean	0.739	0.052	0.251	0.063	2.308	2.167	0.504
Observations	904	904	904	904	904	904	904

Note: Outcomes are measured at midline Wave 3 only. Benchmark: Control condition (“Kultura”) participants who completed Wave 4. HC2 standard errors in brackets.

C.3 Experimenter Demand Effects

To assess the extent to which experimenter demand effects drive the results, we included two questions about the goals and motivation of the study at the end of Wave 4 (endline):

- [Open-ended] What was, in your view, the main motivation of the authors of the study when developing and implementing it?
- [Multiple-choice] What question do you think the researchers wanted to answer?
 1. How people perceive different media
 2. What sources people use to learn the news
 3. How the usage of certain media affects trust in media
 4. What news stories and events people pay most attention to
 5. Other (please indicate)

We examine the differences in the rates of choosing option (3) in the multiple-choice question across experimental arms using an indicator of whether this option was chosen as an outcome. We test the null hypothesis of no effect of any media report on likelihood of guessing the aim of the study using Equation 1 and two-tailed p -value.

As is suggested by the results in Table C5, we do not find strong evidence of experimenter demand effects based on the analysis of choosing option (3) in the question above.

Table C5: Does the treatment affect the perceived purpose of the study?

	Media perceptions	News sources	Media effects	Noteworthy news
Rossiya+Kultura	0.014 [0.032]	-0.008 [0.026]	0.038 [0.032]	-0.034 [0.031]
Rossiya+RTVI	0.078** [0.033]	-0.027 [0.025]	0.017 [0.032]	-0.056* [0.030]
Control mean	0.267	0.161	0.270	0.265
Observations	1165	1165	1165	1165

Note: Outcomes are measured at endline only (Wave 4). Benchmark: Control condition (“Kultura”). HC2 standard errors in brackets. “Media perceptions” is the indicator of choosing the option “How people perceive media,” “News sources” is the indicator of choosing the option “Which news sources people use,” “Media effects” is the indicator of choosing the option “How media consumption affects trust in media,” and “Noteworthy news” is the indicator of choosing the option “Which news and events people notice the most.”

C.4 Attention Checks

We examine attentiveness of study participants using attention checks included in Waves 2 through 4 as an outcome. As is evident from Table C6, we do not find evidence that rates of passing of attention checks included in the surveys were caused by any of the treatments. Note, in addition, that accuracy rates are very high, suggesting that respondents generally paid attention to survey questions and tasks. The exact wording of attention checks in each wave can be found in the survey instruments attached to pre-analysis plan at osf.io/d7w8q.

Table C6: Do respondents across experimental groups differ in their attentiveness?

	Passed attention check:			
	Wave 2	Wave 3	Wave 4	Share across Waves 2-4
Rossiia+Kultura	0.009 [0.009]	0.008 [0.012]	0.002 [0.002]	0.008 [0.006]
Rossiia+RTVI	0.008 [0.009]	0.009 [0.012]	0.002 [0.002]	0.003 [0.006]
Control mean	0.974	0.962	0.998	0.977
Observations	1596	1302	1176	1709

Note: Outcomes are measured at across Waves 3 through 4. Benchmark: Control condition (“Kultura”). HC2 standard errors in brackets.

C.5 Manipulation Checks

We define compliance with the experimental assignment in the context of this study as *viewing news highlights in content analysis tasks* (not the receipt of any specific information contained in displayed news reports). The following factual questions asked about each video allow us to identify respondents who paid attention to the video:¹³

- Did the clip load fully?
- When was this clip broadcast?
- Which TV channel did broadcast this clip?

We construct an indicator for each task in each wave that is equal to 1 if participant answered “Yes” to the first question and answered correctly the second and third question. We take an average of these indicators across tasks within each wave to construct three compliance indicators. In Table C7, we report the estimates of effects of each treatment arm on compliance measures across Waves 1 through 3 where participants completed experimental tasks.

We find differences in compliance in some waves, especially for the *Rossiia+RTVI* treatment in terms of indicating the correct channel, and for the *Rossiia+Kultura* treatment in terms of correctly answering the question about the presence of certain topics. The differences in channel attribution in the *Rossiia+RTVI* group, compared to the control group, are likely to be driven by the fact that Kultura’s logo is visually similar to Rossiia-1’s logo, as these two channels are part of the same state media holding company, so respondents in groups with Kultura were more likely to mistakenly report that Kultura highlights were coming from Rossiia-1, or vice versa. Therefore, the significant differences we observe in the *Rossiia+RTVI* arm are likely due to an increase in correct channel attribution for RTVI. The significantly lower rates of correct topic answers in *Rossiia+Kultura* may be more concerning, but as we can see, the difference dissipates over time, making it less plausible that it leads to significant differences in terms of treatment effects. Moreover, the differences are not large in magnitude, amounting to less than one incorrect answer on average. In addition, Table C8 reports the mean values of compliance indicators for each channel across treatment arms.

¹³See survey instruments attached to pre-analysis plan at osf.io/d7w8q for more details.

Table C7: Does the treatment cause differences in compliance?

	Correct: Channel			Correct: Topic			Video loaded		
	Wave 1	Wave 2	Wave 3	Wave 1	Wave 2	Wave 3	Wave 1	Wave 2	Wave 3
Rossiia+Kultura	0.025** [0.010]	-0.001 [0.008]	0.010 [0.008]	-0.083*** [0.011]	-0.054*** [0.009]	-0.029*** [0.010]	-0.001 [0.004]	-0.001 [0.003]	0.003 [0.004]
Rossiia+RTVI	0.058*** [0.009]	0.019*** [0.007]	0.020** [0.008]	-0.090*** [0.011]	-0.004 [0.009]	-0.014 [0.011]	0.001 [0.004]	-0.002 [0.004]	0.003 [0.004]
Control mean	0.920	0.968	0.970	0.872	0.832	0.867	0.991	0.996	0.992
Observations	2037	1596	1302	2037	1596	1302	2037	1596	1302

Note: Outcomes are measured across Waves 1-3. Benchmark: Control condition ("Kultura"). HC2 standard errors in brackets.

Table C8: Compliance indicators by treatment arm and channel

Experimental group	Channel	Correct: Channel	Correct: Topic	Video loaded
Placebo	Kultura	0.95	0.84	0.99
Rossiia+Kultura	Kultura	0.93	0.80	0.99
Rossiia+Kultura	Rossiia	1.00	0.80	0.99
Rossiia+RTVI	RTVI	0.97	0.84	0.99
Rossiia+RTVI	Rossiia	1.00	0.80	0.99

Note: Kultura videos in control group are restricted to those shown in the Rossiia+Kultura arm.

C.6 Covariate Balance

We examined the balance on observable covariates measured prior to the exposure to any news headlines via a test of independence of treatment assignment from each baseline covariate using `RIttools::xBalance` package. Under independence, in expectation, $k\%$ of the covariates should exhibit imbalance that is significant at the $k\%$ level of significance. Using the 5% level of significance, as shown in Table C9, we do not observe imbalances for more than 5% of covariates across all possible experimental group comparisons.

Table C9: Does treatment assignment predict baseline (pre-treatment) covariates?

Variable	Group mean			RR vs. Control		RK vs. Control		RR vs. RK	
	Control (K)	Rossiia+RTVI (RR)	Rossiia+Kultura (RK)	Std. Diff.	P-value	Std. Diff.	P-value	Std. Diff.	P-value
Age	43.548	43.625	43.459	0.006	0.918	-0.007	0.907	0.013	0.827
Female	0.487	0.447	0.451	-0.079	0.180	-0.072	0.219	-0.007	0.900
Education	2.541	2.555	2.556	0.019	0.733	0.021	0.705	-0.002	0.972
Income level	2.806	2.898	2.810	0.103	0.079	0.005	0.929	0.103	0.081
Employed permanently	0.748	0.725	0.727	-0.050	0.390	-0.046	0.423	-0.004	0.946
Internet tools: VPN	0.518	0.526	0.476	0.016	0.787	-0.084	0.151	0.100	0.088
Internet tools: Total	3.573	3.555	3.517	-0.008	0.875	-0.026	0.622	0.018	0.738
News consumption frequency	2.811	2.810	2.759	-0.001	0.970	-0.071	0.057	0.072	0.073
News from TV	0.778	0.780	0.742	0.006	0.924	-0.083	0.161	0.089	0.134
News from Online media	0.727	0.722	0.739	-0.011	0.851	0.027	0.639	-0.038	0.511
Usage: Rossiia-1	0.713	0.702	0.661	-0.022	0.702	-0.109	0.057	0.088	0.130
Usage: RTVI	0.040	0.037	0.034	-0.018	0.772	-0.036	0.565	0.017	0.777
Usage: State media use	0.252	0.244	0.234	-0.042	0.489	-0.094	0.115	0.054	0.365
Usage: Independent media use	0.070	0.070	0.069	-0.004	0.945	-0.011	0.855	0.008	0.902
Media in Russia unbiased	0.523	0.530	0.486	0.024	0.685	-0.135	0.023	0.157	0.009
Demand for unbiased news	0.365	0.353	0.371	-0.052	0.382	0.029	0.626	-0.082	0.163
Approval of authorities	0.012	0.007	-0.070	-0.006	0.926	-0.090	0.130	0.083	0.162
Policy demand: Law and order	0.207	0.173	0.183	-0.058	0.333	-0.040	0.498	-0.018	0.767
Policy demand: Foreign affairs	0.098	0.160	0.131	0.108	0.072	0.055	0.355	0.050	0.405
Mobile device	0.377	0.329	0.376	-0.099	0.095	-0.001	0.993	-0.098	0.094
Log(pre-treatment duration in minutes)	2.554	2.632	2.562	0.087	0.144	0.009	0.865	0.075	0.171
Proportion of Significant Differences					0.000		0.048		0.048

C.7 Covariate Adjustment

This section presents the regression tables for the main results of the paper using covariate adjusted regression model specified in the pre-analysis plan. We use lasso regression to select the minimal number of covariates that best predict each main outcome and include only these in each outcome's regression. The pool of the baseline covariates we selected from included: Age, Female, Education, Income level, Employed permanently, Internet tools: VPN, Internet tools: Total, News consumption frequency, News from TV, News from Online media, Usage: Rossiya-1, Usage: RTVI, Usage: State media use, Usage: Independent media use, Media in Russia unbiased, Demand for unbiased news, Approval of authorities, Policy demand: Law and order, Policy demand: Foreign affairs, Mobile device, Log(pre-treatment duration in minutes).

The procedure relies on a generalized linear model with lasso penalization, and it is implemented in the [glmnet](#) package in R. The loss function requires selecting a regularization parameter, λ , that determines the severity of the penalty for including extra covariates. Since this regularization parameter cannot be optimally chosen in advance, we select it using 10-fold cross-validation such that λ minimizes the 10-fold cross-validation error averaged over 100 permutations (the folds are chosen at random). Only the covariates retained by the lasso are included in the specification. In other words, for each outcome, the dimensions of matrix X included in the Equation 1 can vary based on the number of covariates selected by the procedure.

The results presented in the table below largely align with the main results reported in the paper. The only departure from the main results we report can be seen in the last three columns of Table C10. This discrepancy is not surprising given that we observe substantial heterogeneity in the treatment effect estimates across the levels of baseline (Wave 1) approval of authorities, prior pro-government media consumption, and baseline attitudes toward the media. In such cases, variance-based re-weighting of treatment effects across the levels of pre-treatment covariates often leads to changes in estimated coefficients. As specified in the pre-analysis plan, we rely on the main specification without covariate adjustment in the paper, but also explore treatment effect heterogeneity using interaction models.

Table C10: Main ITT estimates adjusted for baseline covariates.

	Rossiya-1 coverage:		RTVI coverage:		News quiz:	Perceived media unbiasedness:		Consumed last week:		News awareness:		Behavioral measure:	Indices of political attitudes:		
	Domestic positive	Foreign negative	Domestic positive	Foreign negative	Rossiya-1 or RTVI	Rossiya-1	RTVI	Rossia-1	RTVI	Pro-government	Critical government	Prefer Rossia-1 over RTVI	Authorities approval	Quality of public services	Ukraine concern
Rossiya+Kultura	0.047 [0.040]	0.075 [0.054]	0.134* [0.072]	0.053 [0.068]	0.023 [0.014]	0.023 [0.017]	-0.013 [0.015]	0.091*** [0.024]	-0.005 [0.016]	0.319*** [0.103]	0.150 [0.102]	-0.006 [0.023]	-0.020 [0.032]	-0.008 [0.047]	0.019 [0.041]
Rossiya+RTVI	0.023 [0.042]	0.040 [0.052]	0.238*** [0.072]	0.272*** [0.064]	0.040*** [0.015]	0.002 [0.017]	0.030** [0.015]	0.043* [0.024]	0.126*** [0.023]	0.086 [0.102]	0.039 [0.099]	-0.085*** [0.024]	-0.001 [0.031]	-0.071 [0.047]	0.020 [0.040]
Control mean	3.725	3.529	2.418	2.855	0.669	0.433	0.561	0.720	0.086	2.041	1.292	0.895	-0.001	0.001	-0.002
Observations	1133	1021	1044	1134	1138	1014	1127	1138	1137	1021	1021	1023	1040	1127	1013

Note: Dependent variables are measured at endline only (Wave 4). Benchmark: Control condition ("Kultura"). HC2 standard errors in brackets. "Rossiya+Kultura" row reports the effects of the pro-government media condition, while "Rossiya+RTVI" row reports the effects of the pro-government vs. independent media condition.