

Who Trusts Propaganda? How Autocrats Maintain Pro-Regime Majorities Through Belief Affirmation

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Abstract

Research on propaganda and censorship often focuses on strategies that autocrats can use to persuade skeptical citizens. I argue that this focus overestimates the role of persuasion in authoritarian rule, and I describe a different strategy that popular autocrats can use—affirmation propaganda—that builds credibility by speaking to citizens' existing views. Affirmation propaganda results in more positive perceptions of propaganda outlets and in skepticism about independent media. I test this argument using three studies in Russia. In two randomized experiments, I demonstrate that pro-regime citizens trust reports from state media more than reports from independent media. Additional survey evidence suggests that regime supporters deny disinformation and censorship by propaganda outlets despite often recognizing the pro-government bias of these outlets. One implication of this analysis is that independent media pose less of a challenge to authoritarian rule than previously thought. I also discuss the limitations of affirmation propaganda.

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Recent scholarship highlights an increasingly important strategy that autocrats use to survive in power: information manipulation (King, Pan, and Roberts 2017; Roberts 2018; Sanovich, Stukal, and Tucker 2018). Many authoritarian leaders, such as Russia's Vladimir Putin, have made propaganda and censorship a cornerstone of their rule (Guriev and Treisman 2019), manipulating the public via state-run media (Gehlbach 2010; Walker and Orttung 2014; Rozenas and Stukal 2019). Hence, a key puzzle in the research on authoritarian information manipulation is how autocrats can persuade citizens (Yanagizawa-Drott 2014; Bleck and Michelitch 2017) if the latter are supposed to be skeptical about propaganda and censorship (Wedeen 1999; Koch 2013). One answer given by existing research is that autocrats employ a variety of cleverly designed strategies to make propaganda more convincing (Stockmann and Gallagher 2011; Gehlbach and Sonin 2014; Rozenas and Stukal 2019; Gehlbach 2010; Tolz and Teper 2018).

However, existing work may overestimate the importance of persuasion in the authoritarian context. Research in political communication suggests that, usually, it is difficult to make citizens change or correct their views (Taber and Lodge 2006; Bullock et al. 2015; Nyhan and Reifler 2010), so media can affect individuals' beliefs only marginally (DellaVigna and Kaplan 2007). It is unclear why authoritarian propagandists would persuade more successfully than do media elsewhere.

The emphasis on elaborate manipulation strategies also clouds the fact that much of authoritarian propaganda is not subtle or sophisticated. Often, it amounts to blunt pro-regime messages (Huang 2018) and outrageous lies. For example, during Russia's invasion of Ukraine, the Kremlin's propaganda absurdly maintained that Ukraine was governed by drug-addicted Nazis, and it attributed the Russian army's brutalities to Ukrainians themselves (Faiola 2022). Astonishingly, many citizens appeared to believe these ludicrous statements, and some even rejected the personal testimonies of their Ukrainian family members (Hopkins 2022). Why did Russians, an educated nation with extensive experience in parsing propaganda, not question the Kremlin's falsehoods?

In this study, I present a different explanation of how authoritarian propaganda works. Many autocrats today enjoy substantial, genuine public support, and their foremost concern is *maintaining existing supporters* rather than convincing skeptical citizens. Building on this insight, I develop a theory of “affirmation propaganda,” a strategy of information manipulation targeting pro-regime citizens with belief-affirming messages. Such belief-consistent news reporting, first, reinforces supporters’ affinity for the regime, and second, assures them that state propaganda outlets are trustworthy. Further, regime supporters reject independent media because the critical reporting of such outlets contrasts with more comfortable belief-consistent coverage of state media. Therefore, politically biased news processing ensures that supporters remain in the echo chambers of propaganda.

The strategy of affirmation propaganda has been overlooked in research on autocracies, partly because of the long-standing argument that citizens recognize the manipulative nature of state media (Mickiewicz 2008; Simonov and Rao 2022). In contrast, I argue that such skepticism is highly contingent on one’s political dispositions, and I formally demonstrate that for autocrats who have a large pro-regime majority and face a politically distant opposition, satisfying supporters is more important than persuading those who are still skeptical.

This paper examines affirmation propaganda in Vladimir Putin’s Russia. Putin, a prime example of an “informational autocrat” (Guriev and Treisman 2019), has extensively used propaganda and censorship (Gehlbach 2010; Lipman, Kachkaeva, and Poyker 2018; Beazer et al. 2021), and he maintained strong public support for over two decades. Putin’s manipulation strategies are also emulated by other authoritarian and populist leaders.

My analysis is based on three related studies situated in Russia, including a unique large-scale online experiment ($n \approx 15,600$) in which Russians guessed whether news stories were true or false. My research design has several important features that reduce social desirability and put respondents in a situation similar to real-world news consumption,

encouraging them to evaluate a large and diverse set of news stories. The results of this study are consistent with findings from two other samples of the Russian population and robust across various model specifications.

I first demonstrate that affirmation propaganda works with respect to regime supporters: Pro-Putin respondents in my study were substantially more likely to believe propaganda messages and to reject propaganda-inconsistent messages, which are typically published by independent media. Further, in my experiment, I randomly assigned news stories to be attributed either to state propaganda outlets or to independent news sources. Consistent with my argument, Putin supporters were more likely to believe news messages when their purported source was a propaganda outlet. I replicate this result in a survey experiment on a nationally representative sample ($n \approx 1,600$).

In another large survey on a representative online sample ($n \approx 2,100$), I show that even though many Putin supporters recognized the pro-government bias of state media outlets, most of them still evaluated these outlets as accurate and trustworthy. In contrast, very few regime supporters found the less biased independent media to be trustworthy. I show that trust in state media and skepticism about critical media among supporters are unlikely to stem from insufficient knowledge of independent news organizations.

These findings highlight the power of affirmation propaganda. If autocrats can boost trust in propaganda outlets by deploying belief-affirming messages, it becomes easier to “sell” their other narratives to the public. Moreover, the flow of identity-consistent news from state media dissuades pro-regime citizens from seeking alternative news sources.

My study contributes to the research on the mechanisms of authoritarian regime support (Geddes and Zaller 1989; Guriev and Treisman 2020), highlighting a manipulation strategy that may often be more important to autocrats than persuasion. Moreover, my work suggests the conditions under which autocrats may prefer belief affirmation or persuasion, such as the strength of regime support and the rigidity of the opposition. This

analysis is related to the research by Mattingly and Yao (2021) on the emotional appeals of propaganda, but while their study focuses on persuasion, I highlight a key role of belief affirmation. My study also helps to explain how other manipulation tactics such as blame-shifting (Rozenas and Stukal 2019) work—affirmation propaganda can make them more appealing to the pro-regime majority.

At the same time, the theory of affirmation propaganda highlights that citizens in autocracies are not simply objects of manipulation and brainwashing. Propaganda can be successful only if it accounts for citizens' existing beliefs. Thus, my analysis contributes to the work on the limits of authoritarian control and manipulation (Rosenfeld 2018; Frye 2021).

By documenting biased perceptions of media and propaganda among Russians, my study joins a small but growing literature on political disagreements in information processing in autocracies (Robertson 2015; Chapman 2021; Huang and Yeh 2017; Wojcieszak et al. 2018; Laebens and Öztürk 2020). I highlight how political dispositions prevent citizens from recognizing the lies of propaganda, even when its bias is obvious. Thus, my analysis helps to understand trust in media in authoritarian regimes (Müller 2013)—a finding that is difficult to explain if we believe citizens to be skeptical about propaganda.

I also shed light on another puzzle in the literature on autocracies: why non-democratic regimes allow independent media, which may undermine the plausibility of propaganda (Gläsel and Paula 2020). Previous work has argued that such media can provide autocrats with useful information (Egorov, Guriev, and Sonin 2009; Lorentzen 2014) or make citizens more content (Kern and Hainmueller 2009; Huang and Yeh 2017). Complementing this research, my analysis suggests that citizens trapped in the propaganda bubble find other news sources unattractive, which reduces the danger of independent media to autocrats while keeping the benefits identified by earlier scholarship. Facilitating access to independent journalism, long thought to be an antidote to authoritarianism (Muratov 2021), may

not counter disinformation when citizens choose affirmation propaganda.

Finally, my results are relevant to the formal theoretical work on censorship, propaganda, and Bayesian persuasion (Kamenica and Gentzkow 2011; Edmond 2013; Gehlbach and Sonin 2014), especially with regard to non-democracies. This research commonly assumes a uniform response to information manipulation among citizens and their ability to observe media bias. My analysis suggests that citizens respond to propaganda and perceive its bias very differently depending on their political leanings. Future formal work in this area may consider explicitly modeling the heterogeneity of political preferences, identities, and news perceptions.

1 Affirmation Propaganda as a Strategy of Authoritarian Rule

Autocrats have used information manipulation for centuries, and scholars expect citizens to be suspicious of authoritarian propaganda (Mickiewicz 2008). Thus, theories of propaganda—see, e.g., Gehlbach and Sonin (2014); Luo and Rozenas (2022)—may model it as a form of persuasion, and ask: How do autocrats win over the skeptical public? They may use sophisticated techniques, such as mixing fact with fiction (Stockmann and Gallagher 2011; Gehlbach 2010) or infusing political messages with entertainment (Tolz and Teper 2018), to make their messages more plausible and appealing to moderate citizens. Alternatively, if autocrats understand that propaganda is not credible, they can use it to signal the regime’s dominance (Huang 2015, 2018; Wedeen 1999), induce attitude falsification (Little 2017), distract the public (King, Pan, and Roberts 2017), or undermine alternative information sources (Pearce and Kendzior 2012; Pomerantsev 2015).

However, when the autocrat has strong popular support, especially when this support is rooted in an identity connection between the leader and the public, the calculus shifts

substantially. If the majority is already on the autocrat's side, it becomes more important to prevent the erosion of support rather than to persuade skeptics and critics. And there is often a tension between these two goals. In Appendix A, I show formally that if the pro-regime majority is large enough, and if the opposition is ideologically distant, it is impossible to appeal to both groups simultaneously: persuading critics would mean losing supporters. Under such conditions, the autocrat is better off targeting the sympathetic majority, even if that means further alienating the opposition.

Instead of persuasion, the regime's propaganda focuses on repeating the core beliefs of its support base back to this sympathetic public. Because of confirmation bias (Nickerson 1998), regime supporters more easily accept such belief-consistent messages, even if these messages are untrue. Exposure to belief-affirming messages can also reinforce existing beliefs and identities (Stroud 2010; Prior 2013). Therefore, the regime makes propaganda part of the dialogue with its supporters, using belief affirmation to strengthen the identity links between them. I call this strategy *affirmation propaganda*.

Moreover, by focusing on belief-affirming messages, propagandistic media can improve their credibility among regime supporters because news consumers perceive identity-consistent reporting as more accurate (Gentzkow and Shapiro 2006). As a result, pro-regime citizens underestimate the dishonesty of state media and the extent of regime censorship. Even if supporters recognize the pro-government bias of state media, this bias is in their preferred direction; it may, in fact, signal that these outlets are on the “right” side (Kydd 2003).

Further, attempts to appeal to opposition-minded citizens by decreasing the pro-regime bias may backfire: regime supporters would perceive such more critical news coverage as less accurate and less trustworthy. In other words, affirmation propaganda cannot stray very far from supporters' prior beliefs.

By the same logic, affirmation propaganda helps reduce interest in alternative news

sources. The reporting of independent media may be more balanced and objective, but it goes against the beliefs of regime supporters. As a result, they are likely to view such independent reporting as hostile and untrustworthy (Arceneaux, Johnson, and Murphy 2012), especially in contrast to the belief-affirming coverage of state media. Thus, supporters reciprocate the regime's affirmation propaganda by discounting and avoiding independent media.

Consumption of propaganda may then create a self-reinforcing loop: by supplying belief-consistent messages, the autocrat fortifies positive pro-regime feelings among supporters, which makes the latter willing to consume more propaganda and steer clear of critical reporting. Continual consumption of state media may also bolster the perception that these outlets are trustworthy (Feldman 2011).

This is an echo chamber (Jamieson and Cappella 2008), although a peculiar one: citizens may not enter it by choice, as autocrats suppress alternative media. Yet, more independent alternatives exist in almost all autocracies. But affirmation propaganda makes it easier for supporters to accept limited media choice, joining the regime in its censorship.

The weakness of affirmation propaganda is that it fails to resonate among opposition-minded citizens: to be receptive to it, one needs to exhibit pro-regime beliefs in the first place. But autocrats who have a strong support base can tolerate such costs. Today, when political polarization in autocracies is growing, and citizens sort into regime supporters and opponents (Laebens and Öztürk 2020), this strategy may be increasingly viable. Moreover, in the context of such polarization, critics' opposition to propaganda may even bolster its credibility among supporters, providing them with yet another signal of where propaganda outlets stand.

Of course, many citizens of autocracies are not fervent partisans—they are often detached from politics (Croke et al. 2016; Zhelnina 2020). Affirmation propaganda is less attractive to such depoliticized, “weak” supporters. At the same time, it can still speak to

their political identities and their need to belong to a national community, making it less likely that they would abandon the regime. Politically disengaged citizens can also get trapped in state media echo chambers, partly because they lack interest and motivation to make sense of the news or seek alternative news sources (Alyukov 2022). Thus, affirmation propaganda should be less effective with respect to moderate regime supporters, but it would still be more effective in this case than with respect to regime critics.

To sum up, the theory of affirmation propaganda has several individual-level implications:¹ pro-regime citizens are more likely to believe pro-regime messages but less likely to believe critical (propaganda-inconsistent) messages, compared to regime critics; pro-regime citizens are more likely to trust propagandistic state media and less likely to trust independent (critical) media; when propaganda is more appealing to regime critics, it is less attractive to regime supporters; affirmation propaganda is more effective among core regime supporters than among moderate supporters.

2 Affirmation Propaganda in Russia

Several features of Vladimir Putin's regime in Russia make it an appropriate case for a study of affirmation propaganda.² Throughout two decades, Putin enjoyed strong popular support, usually securing the approval of at least two-thirds of Russians.³ His approval was partly rooted in economic growth in the 2000s (Treisman 2011). But Putin also forged his pro-regime majority by speaking to Russians' national identity and sharing their grievances about Russia's diminished global standing, which he promised to restore (Greene and

¹This theory also has implications about the conditions under which autocrats choose affirmation propaganda, such as having a large pro-regime majority; these implications, which require a variation in regime-level characteristics, may be explored in future work.

²In the 2020s, Putin's regime took a repressive turn, especially after Russia invaded Ukraine in 2022. This analysis is focused on the preceding years, although it may still explain trust in propaganda during and after the war.

³<https://www.levada.ru/en/ratings/>. These surveys by an independent pollster, as I discuss below, generally produced adequate estimates of presidential approval.

Robertson 2019; Sharafutdinova 2020).

Over time, the Kremlin accumulated control over the mainstream media, especially television (Enikolopov, Petrova, and Zhuravskaya 2011; Lipman, Kachkaeva, and Poyker 2018), censoring critical information. The state propaganda outlets⁴ promoted a cult of Putin (Cassiday and Johnson 2010) and increasingly focused on anti-Western and nationalist messages (Tolz and Teper 2018), especially after the annexation of Crimea (Lankina and Watanabe 2017).

Given the strong and consistent public support for Putin, it is reasonable that the Kremlin's propaganda appealed primarily to supporters, especially as the opposition movement, which took an increasingly anti-regime stance, failed to expand (Lasnier 2017). Importantly, propaganda was unlikely to have created the pro-Kremlin majority—Putin enjoyed widespread support even in his first years in power when his control of the media was relatively weak. After consolidating control, Putin focused on reinforcing the existing support.

But how did Russians respond to this propaganda strategy? A large majority continued to get their news from state media, listing television as the most trustworthy source (Levada Center 2020), and only a few followed independent news outlets still available online (Greene and Robertson 2019; Simonov and Rao 2022).⁵ These patterns of media usage suggest that affirmation propaganda may have been effective, but they may also be explained by the logic of convenience or by the non-political content of state media (Gehlbach 2010; Simonov and Rao 2022). To make the case that affirmation propaganda has been successful in Putin's Russia, I examine the key implications of the theory outlined above.

I start with the information processing biases that serve as a basis for affirmation

⁴I use the terms “state media,” “state-controlled media,” and “state propaganda outlets” interchangeably.

⁵During the invasion of Ukraine, almost all independent media were banned, but they were nonetheless accessible via simple tools such as VPNs.

propaganda.

H1a: Putin supporters are more likely to find propaganda messages credible than are opposition-minded citizens (Putin critics).

H1b: Putin supporters are less likely to find propaganda-inconsistent messages credible than are Putin critics.

Further, as propaganda outlets focus on belief-affirming messages,

H2: Putin supporters trust state-run propaganda outlets more than independent media organizations.

At the same time, propaganda's attempts to appeal to critics may backfire among supporters:

H3: When propaganda outlets include propaganda-inconsistent messages, their perceived trustworthiness is increased among Putin critics, but reduced among Putin supporters.

Further, pro-regime citizens underestimate the degree of censorship and deception in state media:

H4: Putin supporters are less likely than Putin critics to recognize that the coverage of propaganda outlets is censored and inaccurate.

Finally, vulnerability to affirmation propaganda depends on the strength of pro-regime orientations:

H5: Moderate Putin supporters are less receptive to pro-regime messages and less likely to find state media credible, compared to strong Putin supporters.

As noted above, there is a feedback loop between pro-regime dispositions and the consumption of propaganda; estimating the direct causal effects of these factors on trust in propaganda is beyond the scope of my analysis. Instead, the empirical contribution of

this paper is demonstrating how affirmation propaganda can exploit supporters' receptivity to pro-regime messages and ensure that they remain in the authoritarian echo chamber. Thus, my analysis explains how propaganda works by focusing on belief affirmation, not persuasion.

3 Research Design

This analysis is based on three surveys conducted in Russia. In all three studies, the participants were shown a number of news stories, including propaganda messages and propaganda-inconsistent messages, displayed in random order. Respondents were asked to indicate whether each story was, in their view, true or false. These evaluations demonstrate regime supporters' receptivity to affirmation propaganda (H1) across different samples of Russians. All three studies also provide evidence that moderate Putin supporters are less prone to affirmation propaganda (H5).

In Study 1, a large-scale online survey fielded on social media in May–June 2020 (“the main study”), I also embedded experiments to examine the perceptions of the credibility of state media outlets with respect to a variety of news stories (H2 and H3). Study 2, a survey fielded via the polling firm Levada Center in August 2019 (“the national survey”), extends this analysis to a nationally representative sample. Study 3, an online survey fielded via the polling company OMI in May–June 2020 (“the media perceptions survey”), provides evidence that regime supporters find specific state-run news outlets trustworthy and accurate despite the bias (H4).

3.1 The Online Quiz (Study 1)

I designed and promoted the main study as a “quiz” that offered respondents an opportunity to test how well they detect false news messages. This approach, inspired by online trivia

quizzes,⁶ has several advantages in examining the perceptions of propaganda.

By turning news evaluations into a game, I provided internal motivation to evaluate a large number of diverse news messages, ensuring that the results are not overly dependent on some selected stories. The quiz premise also improves accuracy motivation, prompting respondents to answer more honestly and reducing expressive responding to political stories.⁷ Further, the quiz was promoted via social media, making the survey experience similar to casual news consumption. My study is the first to use such a realistic instrument to measure evaluations of news stories and news media.

Stories evaluated in the study were news headlines selected from Russian and foreign media and slightly edited for clarity. Some of these statements were false.⁸ The quiz was available online for about three weeks, and at each point in time, respondents evaluated fourteen messages selected before the beginning of the study and two “current” messages, which were regularly scraped from the news aggregator *Yandex.News*. In total, twenty “current” messages were included, two at a time. These stories allowed me to increase the ecological validity of the analysis (Pennycook et al. 2020). Respondents could also take the quiz again and evaluate an additional set of sixteen “pre-selected” stories. The full list of stories and the detailed selection procedure are in Appendix B. Some of these stories were also included in Studies 2 and 3 to understand whether the findings generalize to other samples.

The main study was implemented as a stand-alone web application, and respondents were recruited via social media ads on Facebook. Evidence suggests that social media audiences today are no longer dramatically different from the population at large.⁹ In

⁶See, e.g., the recurring BuzzFeed quiz on fake news: <https://www.buzzfeed.com/tag/fake-news-quiz>.

⁷Increased accuracy motivation may, however, reduce the impact of political reasoning (Prior, Sood, and Khanna 2015). If so, the estimated differences in news perceptions may be somewhat biased downwards.

⁸To determine which were true, I relied on fact-checking websites and did additional fact-checking using reputable news agencies.

⁹Moreover, Russian internet users are a highly relevant group for this analysis, as they are more interested in news, and autocrats increasingly target internet audiences (King, Pan, and Roberts 2017; Sanovich, Stukal, and Tucker 2018).

2020, around 80% of Russians regularly used the internet¹⁰, and a large proportion were Facebook users.¹¹ I followed the suggestions from Zhang et al. (2020) in using Facebook's ad targeting features to make sure that key demographic subgroups were well represented in the sample.

The quiz was completed by 16,935 respondents, but about 12 percent of them did not answer questions about their age, gender, or education, and about 8 percent did not indicate presidential approval. The responses with missing approval were removed from the sample.¹² I also removed the responses from those participants who labeled all stories uniformly (all true or all false), as well as unrealistically fast responses (that took less than one second). Such irregular responses amounted to less than 2 percent of the data. The resulting data set includes 266,885 decisions on the truthfulness of news messages made by 15,637 respondents. Summary statistics for this and the other two studies are in Table B1 in the appendix.

Establishing receptivity to affirmation propaganda (H1). The quiz included messages consistent with propaganda and messages that went against the narratives of propaganda. Propaganda-consistent stories were positive statements about Russia and its government or negative statements about the West or Ukraine, and they were mostly taken from state-run media. E.g., one such (false) story suggested that “*Pope Francis awards [Russian President Vladimir] Putin with a medal called ‘Angel, Guardian of Peace.’ The medal is awarded once in a hundred years, and Putin is its fifth recipient.*” Propaganda-inconsistent messages contained negative statements about Russia and its government or positive statements about other countries; such stories were mostly borrowed from independent media. For example: “*Putin signs a new law that gives him lifetime immunity and the right to be a lifetime senator.*”

¹⁰According to the media analytics company Mediascope: <https://mediascope.net/news/1250827/>.

¹¹In June 2020, 36 million people in Russia accessed Facebook at least once: <https://ppc.world/articles/auditoriya-shesti-krupneyshih-socsetey-v-rossii-v-2020-godu-izuchaem-insayty/>.

¹²In an additional analysis, available upon request, I used a model-based approach to impute the missing approval values, and the results were almost identical.

In the analysis below, I examine Russians' receptivity to propaganda messages by comparing the share of Putin supporters who said that these messages were true with the share of Putin critics who said the same; an analogous comparison is drawn for propaganda-inconsistent messages. These comparisons are estimated as covariate-adjusted contrasts based on the following linear regression:

$$R_{is} = \alpha + \beta DIRECTION_s * SUPPORT_i + \gamma DIRECTION_s + \delta SUPPORT_i + \psi X_{is} + \epsilon_{is},$$

where R is whether the respondent said the story is true, $DIRECTION$ is a set of dummies indicating whether stories are propaganda-consistent, propaganda-inconsistent, or neutral, $SUPPORT$ is a set of dummies indicating levels of support for Putin (see below), and X are controls, including respondent age, sex, and education (in some models), story-level covariates, and the date of the survey. i indexes respondents, and s indexes news stories. Heteroskedasticity-robust standard errors are clustered on the respondent level.

Establishing the perceived credibility of state propaganda outlets (H2). To examine whether supporters view state-run outlets as more trustworthy, I adopted an approach common in the research on source credibility (Botero et al. 2015; Truex 2016). News stories shown to participants were randomly attributed to one news outlet from a list of state and independent news organizations. The name and logo of this randomly chosen outlet were displayed above the text, as shown in Figure B1 in the appendix. The nature of the treatments was revealed in the post-survey debriefing.

Each story received either a **state media treatment** (a government-controlled outlet) or a **critical media treatment** (an editorially independent outlet). At the time of the survey, consumers could easily access all assigned news outlets. State media treatments included the two main television stations, *Channel One* and *Russia-24*, *RIA Novosti* (the main official news agency), *Komsomolskaya Pravda* (*KP*; the most popular newspaper and website in Russia), and *RT* (*Russia Today*), a television channel targeted at foreign audiences but also popular in Russia. All except *KP* were owned by the state; *KP* was controlled by Sergei

Rudnov, a son of Vladimir Putin's friend Oleg Rudnov. Critical media treatments included *Rain*, an online television station, *Meduza*, a popular website, and *Echo of Moscow*, a liberal radio station and a website.¹³ Randomization worked as intended (see Table B3 in Appendix B).

The texts of the news stories were identical in all treatment groups, which means that the differences in the evaluations of news stories should reflect the differences in the perceived credibility of the source. The quantity of interest is the difference between the share of respondents who deemed news stories to be true under the **state media treatment** and the share of respondents who said so under the **critical media treatment**. To establish this effect for Putin supporters and Putin critics, I estimate the following regression:

$$R_{is} = \alpha + \beta SOURCE_{is} * SUPPORT_i + \gamma SOURCE_{is} + \delta SUPPORT_i + \psi X_{is} + \epsilon_{is},$$

where R is the respondent's evaluation of the story (true or false), $SOURCE$ is a set of dummies indicating whether the source is state-controlled or indicating individual news sources (in some models), $SUPPORT$ indicates support for Putin, and X are respondent-level and story-level controls. This analysis does not include three “pre-selected” stories from the beginning of the quiz, which were not a part of the experiment, and sixteen stories from the second quiz (see above), which respondents saw after the debriefing.

3.2 The National Survey (Study 2)

I embedded a similarly designed experiment in a nationally representative survey of 1608 Russian adults by the polling firm Levada Center. As in the main study, respondents saw several news messages, including propaganda and propaganda-inconsistent stories, which were attributed to a state-run or a critical media outlet. The respondents were to decide whether these stories were true. For practical reasons, there were three story vignettes

¹³One other treatment was *RBC*, a private news agency recently acquired by a Kremlin-friendly oligarch. *RBC* was excluded from the main analysis, but as a robustness check, Figure B7 in Appendix B presents the main experimental result assuming *RBC* is state-controlled, and the estimates are similar.

and only two news sources, *Channel One* and *Echo of Moscow*. Further details of the survey and the embedded experiment are provided in [Appendix C](#). I estimate the effect of the state media treatment using the same strategy as with the main experiment.

3.3 The Media Perceptions Survey (Study 3)

The third study establishes whether Putin supporters are more likely to perceive state-run media outlets as accurate and trustworthy (H4) and whether they view critical independent media skeptically. The survey was conducted via the polling company OMI, drawing a sample of 2,100 from OMI's large online panel of respondents in all eight federal districts of Russia. I implemented age and sex quotas derived from a nationally representative sample of the Russian population.

The first measure of interest is whether one trusts any propagandistic media or any independent media. I asked respondents to name two or three news outlets that they trust the most. Then, two dummy variables capturing whether one named any of the state-run television stations or any of the critical news outlets,¹⁴ respectively, were constructed. I estimated the differences in trust between supporters and critics via the following regression:

$$T_i = \alpha + \beta SUPPORT_i + \gamma X_i + \epsilon_i,$$

where T is trust in state-run or critical media, $SUPPORT$ is a set of dummies indicating support for Putin, and X are sociodemographic controls. Heteroskedasticity-robust standard errors were used.

The second set of measures captures the perceived accuracy and bias of four state media outlets: *Channel One*, *Russia-24*, *RIA*, and *RT*. I used two dimensions to capture the perceptions of accuracy ([Meyer 1988; Kohring and Matthes 2007](#)): (1) whether these

¹⁴The full list of state-controlled and critical media outlets is provided in [Appendix B](#).

news outlets offer complete news coverage (they are not censored), and (2) whether they report the facts accurately; the question wording is in Appendix D. Two additional dimensions were used to characterize media bias: (1) whether the coverage of the outlet is pro-government, anti-government, or neutral, and (2) whether the outlet is editorially independent of the authorities.

Given multiple answer options, including “hard to say,” I analyze these perceptions via multinomial logistic regressions, and I control for whether one indicated knowing the state-controlled outlet in question. Otherwise, the regression setup is the same.

3.4 Measuring Support for Putin

All three studies included the following question: “*Do you approve of the performance of the president of Russia?*” Response options were: certainly approve, somewhat approve, somewhat disapprove, certainly disapprove. This language has been commonly used in Russian polls to establish support for President Putin. A recent study has found that surveys asking such questions produced adequate estimates of presidential approval (Frye et al. 2017), at least before Putin’s regime became more repressive in 2022. The risk of overstating support in an anonymous online survey was even lower (Huang and Yeh 2017).¹⁵ To mitigate the risk of reverse causation, the question about Putin’s support was asked before any information treatments.

Figure 1 shows the distribution of presidential approval in all three surveys, indicating that in the two online surveys, the share of supporters is substantially lower. For this study, it is most important that there is sufficient variation in presidential approval within each sample, but the diversity of these samples also provides a chance to establish that the relationships of interest hold in different groups of the Russian population.

¹⁵In the pre-testing of the quiz, there was virtually no difference in the probability of continuing the survey depending on whether the question about presidential approval was included.

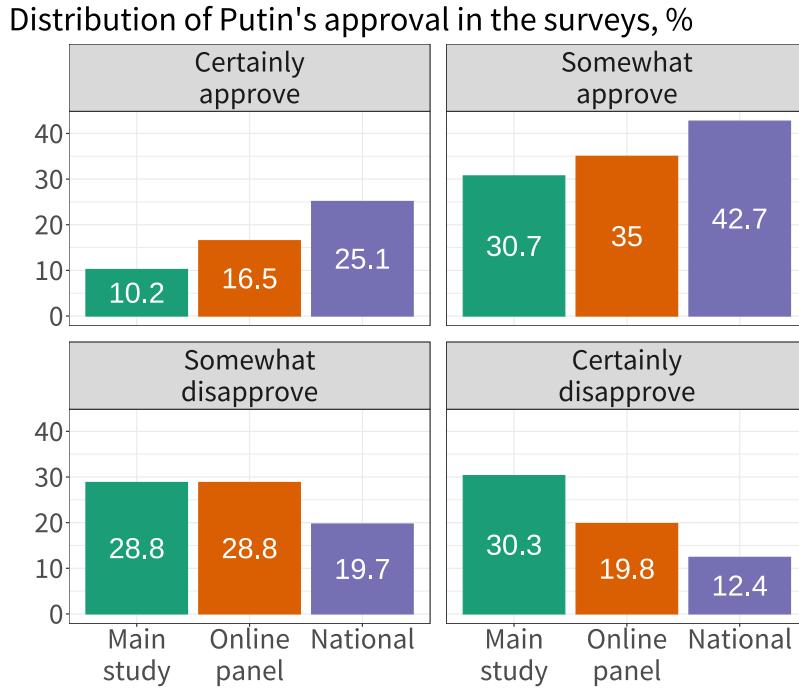


Figure 1: The distribution of presidential approval in the three survey samples: the social media sample, the online sample (OMI), the nationally representative sample (Levada)

Support for Putin is used here as a key measure of pro-regime orientations. In the appendix, I report the experimental results with additional measures of these orientations, which reflect the anti-Western and pro-state views common among Putin supporters; these results are similar.

4 Findings

4.1 Supporters Are Receptive to Regime Propaganda

Figure 2 shows that Putin supporters on average were 11 percentage points more likely to find propaganda stories credible than were Putin critics, which is consistent with hypothesis H1a. The difference is virtually unchanged when the estimate is adjusted for covariates, including age, gender, and education, and when the analysis is restricted to

respondents who evaluated news stories without any sources (Figure B2). The pattern is consistent between individual stories (Table B2) and different samples of Russians (Figure B3).

As an example, 73 percent of pro-Putin respondents in the main study found credible a fabricated story that California had banned the words “husband” and “wife” to support same-sex marriages. Such statements conform to the anti-LGBTQ and anti-Western narratives that the Putin regime promotes and that many of its supporters subscribe to.

Putin supporters find propaganda stories more credible

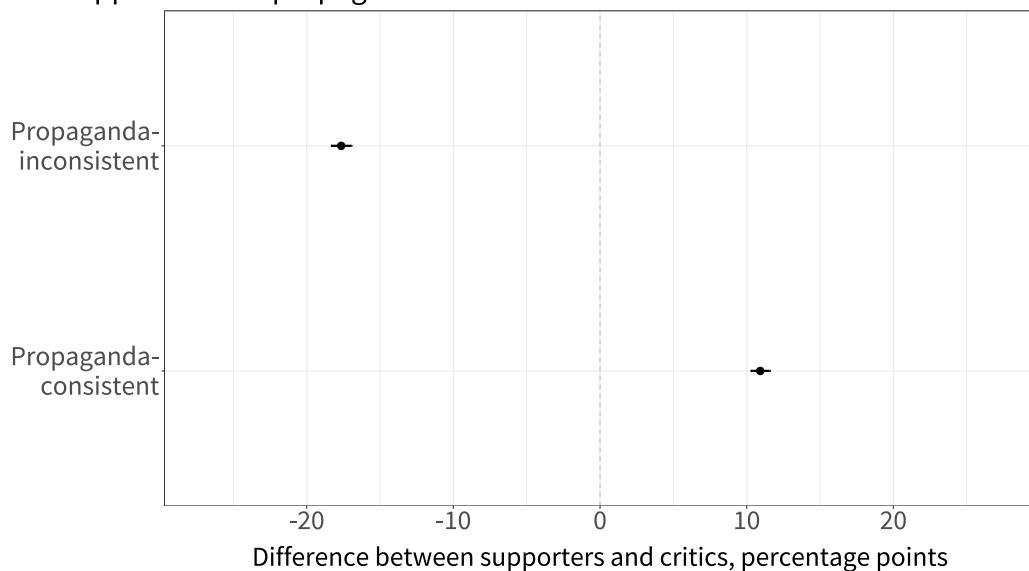


Figure 2: Difference in the shares of Putin supporters and critics who found propaganda-consistent and propaganda-inconsistent stories credible. Results from the main study. 95% confidence intervals are shown.

Figure 2 also shows that Putin supporters were, on average, about 18 percentage points less likely to recognize propaganda-inconsistent stories as true, as suggested by hypothesis H1b. Only 16 percent of supporters, for example, found credible a report that Putin had given himself lifelong immunity from prosecution, and only 14 percent believed a report that the Ukrainian economy had been growing faster than the Russian economy. In sum, regime supporters have a strong bias against such critical information.

4.2 Supporters Find Propaganda Outlets More Credible Than Independent Media

According to my theory, the focus on belief-consistent information makes state propaganda outlets appear more credible to supporters compared to independent, critical media (H2).

Figure 3 shows the effect of changing the treatment from an independent media source to a state-run source on the probability of saying that news stories are true, depending on presidential approval.¹⁶ “Strong” supporters or critics are those who “certainly” approve or disapprove of the president, and “moderate” supporters or critics are those who “somewhat” approve or disapprove.

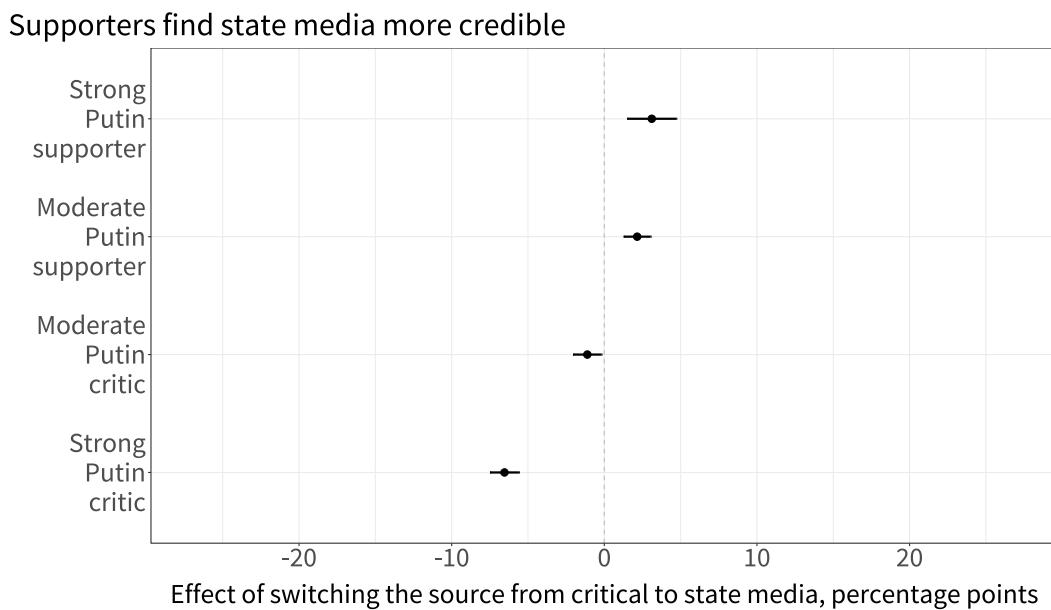


Figure 3: The effect of changing the treatment (source attribution) from critical to state media outlet on evaluations of news stories, by approval of Vladimir Putin. Calculations based on a linear regression of news story evaluations on state control and presidential approval; results from the main study. 95% confidence intervals are shown

In line with hypothesis H2, Putin supporters were 2-3 percentage points more likely to say that a story was true when it was attributed to a state propaganda outlet, compared to

¹⁶The effect is the difference between the share of respondents that found a story true and the share of respondents that found a story false, averaged for all stories and adjusted for covariates. The effect is calculated for each subgroup via the R package *emmeans* (Lenth 2019) based on the regression model.

when an independent news outlet was assigned.¹⁷ This effect is of similar magnitude to the effects of media source cues established in other studies (Clayton et al. 2020), and it is striking that respondents would find state media more credible, given that these outlets often engage in censorship and disinformation.

These results are robust to different model specifications and to using alternative measures of pro-government orientations (Tables B4 and B7, Figures B4 and B7 in the appendix). The results are, moreover, consistent across different kinds of news stories (Table B8 and Figure B6). Further, in the experiment that I embedded in a national survey by the Levada Center (Study 2), Putin supporters also perceived information from state media as more credible (Figure C1).

The source credibility effects documented here make affirmation propaganda more effective: regime supporters who encounter propaganda stories would be even more likely to believe these stories if their source is a state-run media outlet. On the contrary, if supporters see critical stories about the government, they would find such messages even less plausible when the source is an independent outlet.

4.3 Critical Messages From State Media Backfire Among Supporters

Hypothesis H3 suggests that if state media outlets moderate their pro-regime bias by sending more critical messages, it can improve trust among regime critics but undermine trust among supporters. We can test this possibility by examining the effect of switching news sources with respect to propaganda-inconsistent stories.

Figure 4 supports this expectation. First, for Putin critics, the effect of state media was closer to zero when propaganda-inconsistent stories were considered, which means that opposition-minded respondents were less skeptical about propaganda outlets when these

¹⁷Figure B5 in Appendix B shows that the results are consistent across individual state-run and independent news sources.

outlets sent more critical messages. Moreover, the effect of state media was essentially zero when strong Putin supporters evaluated propaganda-inconsistent news stories; thus, when propaganda outlets attempt to appeal to critics, they may lose their credibility advantage among supporters. The evidence here is not definitive (the confidence intervals overlap), but it highlights an important trade-off implied by the theory. It also suggests that the aforementioned credibility advantage of state media among supporters may be explained by the emphasis that state media place on pro-regime messages.

The effect of state media label by type of news stories

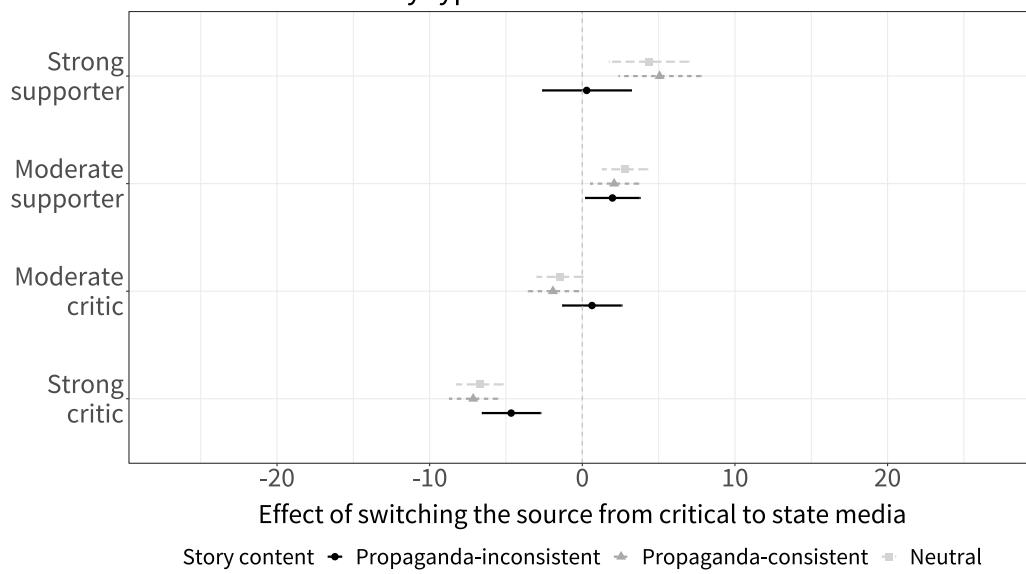


Figure 4: The effect of changing the treatment from critical to state media outlet on evaluations of news stories, by approval of Vladimir Putin and by the political content of news stories. Calculations based on a linear regression of news story evaluations on state control and presidential approval (see text for details); results from the main study. 95% confidence intervals are shown

4.4 Supporters Find State Propaganda Outlets Trustworthy Despite the Bias

In the online survey fielded via OMI (the media perceptions survey), I asked Russians to report their perceptions of specific state-run media outlets. First, Figure 5 demonstrates that Putin supporters were very likely to list state television channels among their trusted

sources (for regression estimates, see Table D2 in Appendix D). About 80 percent of strong regime supporters reported trusting at least one state television station, in contrast to just about 20 percent of strong critics.

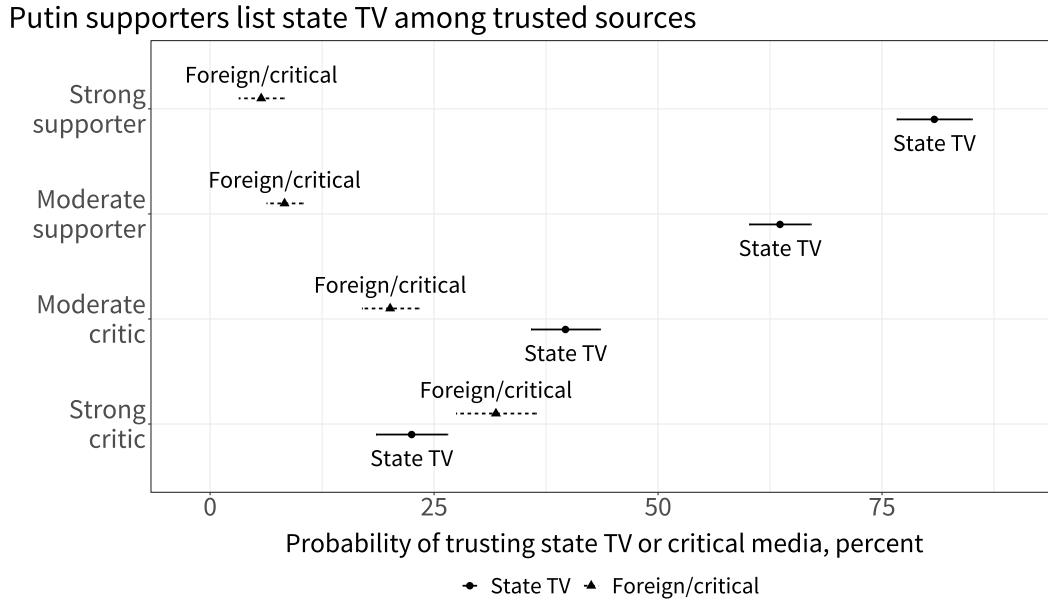


Figure 5: The probability of trusting critical media or state television, by approval of Vladimir Putin. Calculation based on a linear regression of media use (dummy variables) on presidential approval and demographic covariates; results from the OMI online panel (Study 3). 95% confidence intervals are shown

The respondents were also asked to evaluate key state media outlets—*Channel One*, *Russia-24*, *RIA*, and *RT*—along four dimensions: whether their coverage was accurate, complete (uncensored), and politically unbiased, and whether these outlets were politically independent. Figure 6 reports the percentage of Putin supporters and critics who agreed with such characterizations of state media (regression tables are in [Appendix D](#)).

Importantly, the majority of supporters recognized that state media were influenced by the authorities and were not neutral or objective; only 30–40 percent of pro-Putin respondents believed state propaganda outlets to be politically neutral and independent. But, consistent with hypothesis H4, most supporters thought the coverage of propaganda outlets to be generally accurate, and they said that these outlets rarely engaged in censorship. For example, 58 percent of supporters admitted that *Channel One* was not independent of

Supporters evaluate state media as accurate despite bias

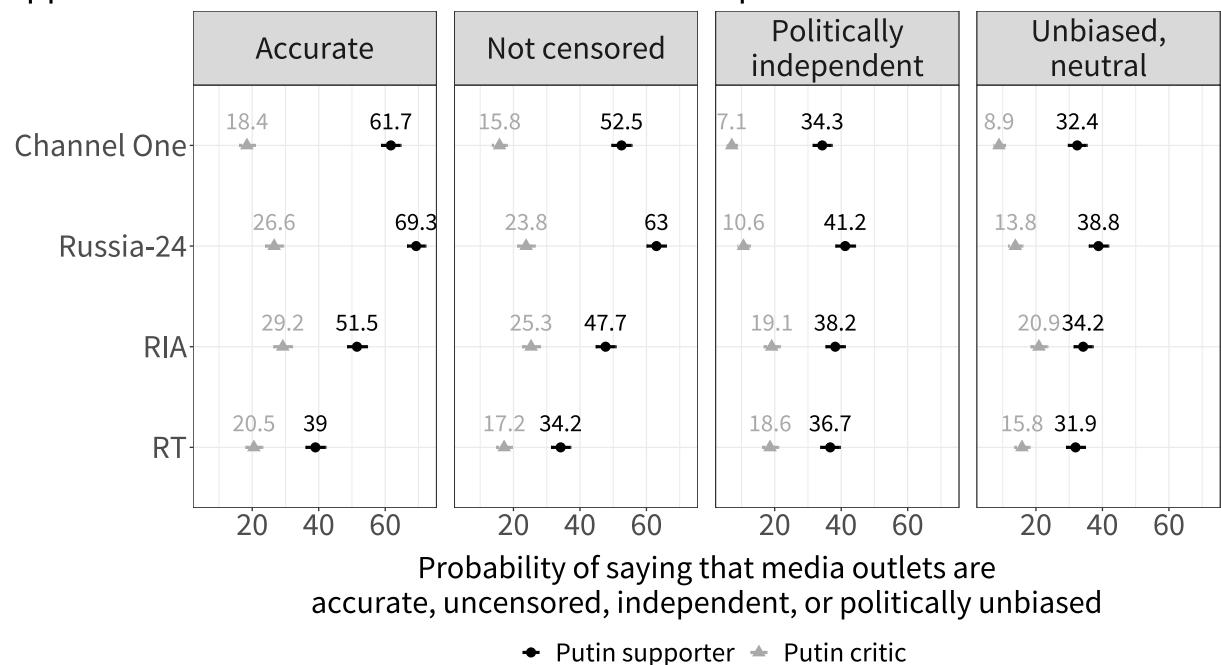


Figure 6: The probability of agreeing with the statements that state media (Channel One, Russia-24, RIA, RT) are accurate, not censored, politically independent, and politically unbiased, by approval of Vladimir Putin. Calculations based on multinomial regressions of news source evaluations on presidential approval and demographic covariates; results from the OMI online panel (Study 3). 95% confidence intervals are shown

the authorities. And yet, 89 percent of those who recognized this lack of independence claimed that *Channel One*'s coverage was mostly accurate, and 53 percent listed this station among trusted news outlets. This underscores how powerful affirmation propaganda can be and how little citizens may value media independence when authoritarian media are biased in their preferred direction.

In addition, along all these dimensions, as in the source credibility experiment, Putin supporters evaluated state media much more positively than did critics. Among opposition-minded respondents, only a small minority said that state propaganda outlets were accurate and uncensored, and very few called these outlets unbiased and independent. This large divergence between critics and supporters emphasizes the main trade-off explained above: it is not worth it to make state media more appealing to the very skeptical minority given that the majority is fine with these media, and drastic changes to the propaganda coverage may alienate some of the pro-regime citizens.

Crucially, the positive perceptions of propaganda outlets among pro-regime citizens are not a result of poor awareness of alternative news sources. In my online panel, almost 60 percent of Putin supporters reported knowledge of some independent news organizations, which at the time of the survey were easily available online. However, as Figures D2 and D3 in the appendix show, pro-regime respondents who were aware of independent media still trusted state media a great deal, and they evaluated state-controlled outlets quite positively.

Regime supporters did not view independent media as a better alternative even if they found state media inaccurate or biased. Among pro-Putin respondents who found *Channel One* accurate and truthful, 5.4 percent reported trusting at least one independent news outlet, but among supporters who admitted that *Channel One* often publishes false information, this proportion was 6.6 percent—essentially, the same.

This analysis makes it clear that for a substantial number of pro-Putin respondents,

being in the propaganda bubble was a choice, not an inevitability.¹⁸ Regular consumption of propagandistic media may, in turn, make citizens even less sensitive to the bias of propaganda (Feldman 2011), reinforcing trust in state-run outlets.

4.5 Affirmation Propaganda Is Less Effective Among Moderate Supporters

Hypothesis H5 suggests that receptivity to affirmation propaganda depends on the strength of one's connection to the regime. My data consistently support this expectation. In the main study, moderate Putin supporters were 5–6 percentage points less likely to believe pro-government stories but more likely to believe propaganda-inconsistent stories, compared to strong supporters (the rightmost panel in Figure B2). Moderate supporters were also substantially less likely to trust state media (Figure 5) and to evaluate these media as accurate. For example, among strong Putin supporters, 75 percent said that *Channel One*, a key propaganda channel, provided accurate news coverage, but among moderate supporters, only 50 percent agreed.

Moderate supporters were thus more likely to understand the propagandistic orientation of state media and to resist their messaging. Affirmation propaganda may still help autocrats to dampen such skepticism or at least to deter citizens from seeking alternative information sources, but it has its limits. And if public support for the regime erodes, such propaganda would lose some of its power.

¹⁸Figure D1 in the appendix shows that pro-Putin respondents, especially strong supporters, predominantly relied on state propaganda outlets, and they were highly unlikely to use any independent media.

Conclusion

This study has used a unique experimental approach and survey data from Russia to demonstrate that belief affirmation can improve trust in authoritarian propaganda and, ultimately, help autocrats maintain regime support. Pro-regime citizens are willing to tolerate a limited media choice and the bias of pro-regime news outlets. Many, in fact, welcome such biased news coverage, and they remain locked into pro-regime content by choice, being averse to independent media and critical information.

My analysis thus suggests that leaders such as Vladimir Putin do not have to be masters of persuasion. Rather, the secret of their stable public support is that they have found narratives and emotions that resonate with citizens, and they craft propaganda messages around these narratives.

Further, extending access to alternative news sources may not deter citizens from consuming propaganda.¹⁹ Supporting independent journalism is still important, but its role as an antidote to propaganda is limited, as it mostly appeals to citizens who are already critical of their governments.

However, affirmation propaganda tactics make it increasingly difficult for autocrats to reach out to the opposition-minded public. Belief-affirming messages targeted at supporters may even provoke a backlash among critics. Peisakhin and Rozenas (2018) describe a similar polarizing effect of Russian state television in Ukraine. Yet, the hardening of the opposition pushes autocrats to double down on affirmation propaganda as they lose any hope of convincing the critics.

Belief-affirming messages are also ineffective when autocrats need to convince the public of something genuinely unpopular. For example, Russian state media failed to promote anti-COVID measures (Kovalev 2021) despite using affirmation propaganda tactics,

¹⁹ Similarly, Chen and Yang (2019) demonstrate that many Chinese would not engage with independent foreign media even when they are given easy access to such media.

such as blaming the West for the pandemic and celebrating Russia's triumph in developing its own vaccine. Research also shows that Russians process propaganda more scrupulously when it comes to economic problems (Rosenfeld 2018).

The lessons from this analysis apply to electoral autocracies and “illiberal democracies” that rely on public support and information manipulation, avoiding large-scale repression. Thus, future research may examine how effective affirmation propaganda is in other such regimes, and to what extent leaders such as Recep Tayyip Erdoan in Turkey or Viktor Orban in Hungary deliberately apply belief-affirming tactics.

Further, it is important to study how and under what circumstances autocrats choose affirmation propaganda or strategies focused on persuasion. What happens, for example, when leaders who rely on belief-affirming tactics start losing support? My theory suggests that switching to persuading the opposition may be more effective in a situation like this, but it is important to investigate whether such strategy shifts are successful.

It is also worth considering how affirmation propaganda operates when an informational autocrat turns to harsher and more repressive tactics, as Vladimir Putin did during the war against Ukraine in 2022, blocking access to independent news sources and introducing punishments for telling the truth about the invasion. Does such sudden censorship affect citizens who rely mainly on state media? Does affirmation propaganda maintain its impact when autocrats demand wartime sacrifices from citizens?

Finally, why and how are citizens able to resist authoritarian propaganda and disinformation? As my analysis shows, some regime supporters perceive state propaganda skeptically despite its emphasis on belief-affirming messages. Understanding what makes citizens less vulnerable to information manipulation and under what conditions citizens become more skeptical and seek alternative information sources is an important avenue for future research.

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Online Appendix A: Formalization of the Argument

The formalization of the affirmation propaganda argument outlined here is adapted from theoretical models of Bayesian persuasion ([Kamenica and Gentzkow 2011](#)), including their application to media control ([Gehlbach and Sonin 2014](#)). In these models, one actor, the sender, aims to persuade another actor, the receiver, to take an action that the sender prefers rather than the action that the receiver prefers in the absence of the sender's messages. The formalization here incorporates heterogeneity of prior beliefs among receivers, which in this context corresponds to pro-regime or oppositional attitudes.²⁰ The analysis below demonstrates that under certain conditions, autocrats have to choose between maintaining existing support and convincing the unpersuaded.

The autocrat is the sender, and the citizens are the receivers. There are two groups of citizens, A (the pro-regime majority) and B (the opposition, or the minority), of sizes α_A and α_B , where $\alpha_A > \alpha_B$, and $\alpha_A + \alpha_B = 1$.

The state of the world $\theta \in \{0, 1\}$ is a random variable, unobserved by autocrat and citizens. The variable θ may represent, e.g., economic or government performance; $\theta = 1$ means that the state of the world is good. Citizens do not observe the state of the world, and they must choose an action $a \in \{a_0, a_1\}$, e.g., a_1 could be voting for the autocrat, and a_0 would be voting against. Citizens' payoffs are dependent on their action and on the state of the world: for any citizen i , the payoff is x if $\theta = 0$ and $a_i = a_0$, $1 - x$ if $\theta = 1$ and $a_i = a_1$, and 0 otherwise.

In a departure from the standard framework, I assume that citizens have heterogeneous prior beliefs about the state of the world, $p_A > x$ and $p_B < x$, where p_B is the weight group B places on the event $\theta = 1$. That is, group A is ex ante inclined to take the autocrat's preferred action a_1 , and group B is ex ante not inclined to take that action. The autocrat's payoff is equal to the share of citizens that take the action a_1 .

Before the state of the world is realized, the autocrat commits to a "signal structure," which is a probability distribution over messages for each state of the world. With probability β_θ , the autocrat sends the propaganda message $m = 1$. Without loss of generality, I assume $\beta_1 = 1$, so that the news is always "good" when the state of the world is "good." Of primary interest is β_0 , which can be interpreted as media bias.

The state of the world is then realized, and the propaganda message is generated based on β . Citizens then update their beliefs using Bayes' rule and choose the action a .

What is the level of media bias β_0 that maximizes the autocrat's payoff? The choice of β_0 by the autocrat is constrained by the conditions under which the receivers would take the sender's preferred action when $m = 1$; following Bergemann and Morris ([2019](#)), I refer to these conditions as obedience constraints. I ask: If there are two groups of citizens with different priors, when is it optimal for the autocrat to set media bias β_0 such that the obedience constraint for group B is satisfied (B takes the action a_1), and when is it, instead, optimal to simply focus on satisfying the constraint for group A (ensuring that A

²⁰I am grateful to Scott Gehlbach for suggesting this approach to the formalization.

is still willing to take the action)?

It is always possible to ensure that group A (the majority) takes the autocrat's preferred action as long as the autocrat is willing to forgo persuading group B (the opposition). For example, if the autocrat sets $\beta_0 = 1$, propaganda always sends a positive signal ($m = 1$), and there is no updating for either group. The autocrat's expected payoff in this case is α_A (the share of A in the population), as only citizens in A choose a_1 .

However, the reverse is not true: if the autocrat persuades group B to take the action, it is possible that group A will not take the action. To satisfy the obedience constraint for B , media bias β_0 should be sufficiently low so that $m = 1$ could be an informative message for B . Given that $Pr_B(\theta = 1) = p_B$, the obedience constraint for B is $\frac{p_B}{p_B + (1-p_B)*\beta_0} \geq x$. Rearranging, media bias such that the obedience constraint binds for B is $\beta_0 = \frac{p_B}{1-p_B} * \frac{1-x}{x}$.

Implementing media bias to convince B means that sometimes the autocrat must send $m = 0$ when $\theta = 0$. When this is the case, group A (the majority) will also infer that $\theta = 0$ and not take the action preferred by the autocrat.

The choice between two strategies—targeting only the majority versus attempting also to persuade the opposition—depends on the various parameters of the model. As shown above, the payoff from the first strategy is α_A . To define the autocrat's expected payoff in the second case, posit an (ad hoc) “true” prior $p = Pr(\theta = 1)$. Then, the autocrat's expected payoff is $p + (1 - p) * \frac{p_B}{1-p_B} * \frac{1-x}{x}$, given the optimal media bias derived above.

The autocrat thus focuses on convincing B if $p + (1 - p) * \frac{p_B}{1-p_B} * \frac{1-x}{x} > \alpha_A$, so the choice depends on the size of the majority (α_A) and on p_B . Reaching out “across the aisle” can be beneficial only if p_B is sufficiently large (close to x), so the autocrat can win B over by sending $m = 0$ only occasionally, and if α_A is relatively small.

With small values of p_B —if p_B is distant from x and, therefore, from p_A —autocrats need to send informative messages ($m = 0$) often if they want to win over the highly skeptical opposition, but such messages would also alienate many members of the majority. In other words, if there is a large divergence in priors between the supporting majority and the opposition, it is not optimal for the autocrat to cater to the latter. Further, if the size of the ex-ante pro-regime group is large enough, the autocrat can simply produce uninformative (positive) messages all of the time regardless of the difference in priors between the two groups.

The situation when there is a strong majority that supports the autocrat and the opposition is small but ideologically distant is observed in certain authoritarian regimes. In this environment, the autocrat would in equilibrium choose substantial media bias that targets the majority group alone—that is, would choose affirmation propaganda.

Online Appendix B: Additional Evidence From the Main Study (the Social Media Sample)

A Note on Human Subjects Research

This study was determined to be exempt by the Institutional Review Board at the University of Wisconsin-Madison (IRB protocols ID 2019-0763, 2019-0800, and 2020-0639), as defined under 45 CFR 46 (Category 2). For questions, you may contact the Education and Social/Behavioral Science IRB at 608-263-2320. The study is in compliance with APSA's Principles and Guidance for Human Subjects Research. In particular, the participants were Russian adults who engaged with the study using their native language; the participants provided their informed consent to participate in the study; the study did not collect any identifying data on the participants; their responses are kept confidential and are analyzed only in an aggregated form. The sample size was determined based on the number of experimental treatments and the heterogeneous effects that were to be examined.

The experiment on the social media sample and the survey experiment embedded in the Levada survey involved slight deception—specifically, some participants might have seen news messages attributed to news sources that had not actually published these news stories, and the purpose of the study was not fully disclosed in the beginning of the surveys. In both cases, the deception was necessary in order to avoid demand effects and other distortions: if participants were aware that the purpose of the study was to understand their news source perceptions and the relationship between source perceptions and political views, they might not have answered truthfully. The purpose of the study and the nature of the experimental manipulation were fully disclosed to participants in the debriefing message displayed after the completion of each survey. The subjects were able to contact the researcher in case they had any questions.



Figure B1: This is an example of an experimental vignette with a news story attributed to a state-controlled news outlet, Russia-24

Summary Statistics

Table B1: Summary statistics for the three samples

Variable	Main study		National survey		Online panel	
	%	Non-missing	%	Non-missing	%	Non-missing
Approves of president (dummy)	40.9	15637	67.8	1567	51.6	2098
Uses critical media	43.9	15533	NA	NA	18.4	2098
Uses state-controlled media	64.2	15533	NA	NA	81.6	2098
Uses state TV	40.9	15533	80.1	1560	65.4	2098
Female	55.2	14431	55.0	1567	50.0	2098
Higher education	81.9	14390	29.5	1567	58.4	2098
Age 18-24	6.3	14680	9.3	1567	10.9	2098
Age 25-34	21.8	14680	19.1	1567	25.9	2098
Age 35-44	23.4	14680	22.4	1567	30.7	2098
Age 45-54	20.8	14680	13.5	1567	14.8	2098
Age 55-64	19.4	14680	21.1	1567	14.3	2098
Age 65+	8.2	14680	14.6	1567	3.5	2098

Note: The sample is limited to respondents with non-missing data on presidential approval.

The Procedure for the Selection of News Stories

Fourteen news stories in the main quiz and 16 stories in the second quiz (see the main text for details) were selected from top news stories by Russian online news aggregators in the months preceding the study. Several news stories were sought and included specifically to ensure, first, that there were some false news stories in the list, and second, that there were propaganda-consistent, propaganda-inconsistent, and neutral stories.

To check the veracity of these news stories, I relied on existing fact-checking resources such as *Politifact* and the fact checks regularly published by the Russian investigative web site *The Insider*. When existing fact checks were not available, I fact checked the stories based on reports by authoritative independent news agencies, economic reports, and other data. If the veracity of a story could not be established, the story was excluded from selection.

Two slots in the quiz were reserved for “current” stories that were updated two or three times a week based on recent news reports. First, I used a web scraping script to download top news stories on politics and international news from *Yandex News*, Russia’s largest news aggregator with a daily audience of 9 million people. *Yandex* uses an algorithm to determine the news stories that are popular at any given moment. “Politics” and “world news” are two of the sections on the *Yandex News* main page, and at any particular moment, there are several dozens of news stories under each of these two labels.

After downloading all the stories in these two categories, I eliminated irrelevant messages based on several criteria: stories that reported future events without indicating their substance (e.g., announcements of press conferences); stories that were developing and could change quickly (e.g., the number of deaths from COVID-19); stories focused on technical details of events (e.g., the amount of shipments entering a port, low-level bureaucratic appointments); opinions or personal statements, except for statements by key political and business leaders; stories that could not be reliably fact-checked (e.g., information about military operations).

This preliminary selection produced shorter lists of candidate news stories under both “politics” and “world news.” After obtaining these lists, I used a random number generator to select one news story from each of the two topics. These two news stories were fact-checked and then added to the survey. Largely, I aimed to preserve the headlines from *Yandex News*, sometimes expanding the headline based on the text of the corresponding news story or slightly editing it for clarity.

The Categorization of State-Controlled and Critical Media Outlets

Various analyses in this study rely on a categorization of news outlets as state-controlled or critical. This subsection lists all the news outlets that are used in the study either as experimental treatments or as answer choices in questions about media trust and media usage. News outlets that are included as treatments in the experiment are in **bold**.

State-controlled media outlets: *Channel One, Russia-24, Russia-1, Vesti, RT, RIA, TASS, Zvezda, Sputnik, Rossiyskaya Gazeta (RG)* (all of the preceding outlets are owned by the government); *NTV, RenTV, Komsomolskaya Pravda (KP), Moskovskiy Komsomolets, Izvestiya, Lenta.ru, Gazeta.ru, Vzglyad* (these outlets were controlled by pro-Kremlin oligarchs).

Critical media outlets: *Rain, Novaya Gazeta, Vedomosti, Rosbalt* (owned by independent entrepreneurs); *Echo of Moscow; BBC, Meduza, Euronews*, and other foreign news sources.

The list of news outlets also included *RBC* and *Kommersant*, business news outlets that were controlled by Kremlin-friendly oligarchs but were not as propagandistic as the state-controlled media organizations listed above.

This list of news outlets was compiled based on several internet rankings of most popular websites in Russia (*Yandex.Radar, Liveinternet, Rambler Top 100, Mediametrics*), and some less popular, but important critical news outlets such as *BBC* were added.

The categorization into state-controlled and critical news outlets is based on media ownership, on news reports on the Russian media industry, and on previous scholarship that has examined or categorized Russian media ([Simonov and Rao 2022](#); [Greene and Robertson 2019](#); [Schimpfössl and Yablokov 2017](#)).

News Stories in the Experiment

Table B2: News messages evaluated in the main study

Code	Text	False?	Political	Direction	Mean evaluations		
					Overall	Critic	Supporter
1	A man in Britain pretended to be deaf for 62 years to avoid listening to his "too talkative" wife	FALSE	No	Neutral	0.581	0.575	0.577
2	Because of sanctions against Russia, the European Union has lost 500 billion euros	FALSE	Yes	Propaganda-consistent	0.493	0.401	0.616
3	In the last four years, the Ukrainian economy grew faster than the Russian economy, and it grew twice as fast in the past year	TRUE	Yes	Propaganda-inconsistent	0.249	0.328	0.138
4	A man in the Moscow region has lived for 60 years with only one brain hemisphere. Doctors did not find any problems with his motor apparatus or vision	TRUE	No	Neutral	0.446	0.451	0.428
5	Russian scientists created plants that constantly phosphoresce. The new kind of plant is developed based on the tobacco plant, using fungi genes	TRUE	No	Neutral	0.390	0.403	0.373
6	A biology student from the University of Miami crossbred strawberries with marijuana, fulfilling his old dream	FALSE	No	Neutral	0.359	0.391	0.326
7	Trump thanked Putin for the oil deal and said that "he acted like a real gentleman"	TRUE	Yes	Propaganda-consistent	0.520	0.490	0.574
8	In New York, trucks with dozens of decomposing bodies were found. The locals called the police after suffering from an unpleasant smell for several days	TRUE	Yes	Propaganda-consistent	0.400	0.372	0.442
9	Pope Francis awarded Putin with the medal "Angel, Guardian of Peace." The medal is awarded once in a hundred years, and Putin is its fifth recipient	FALSE	Yes	Propaganda-consistent	0.185	0.145	0.227
10	A study by the U.S. National Academy of Sciences has shown that a human was first infected by the new type of coronavirus in America in 2019. The outbreak in China was caused by a mutated version of this virus	FALSE	Yes	Propaganda-consistent	0.430	0.379	0.500
11	Russia is again bringing in uranium waste from Germany. In the 2000s, this practice was stopped after protests	TRUE	Yes	Propaganda-inconsistent	0.574	0.663	0.448

12	Americans who lost their jobs due to coronavirus do not want to look for new jobs; for many, unemployment benefits are greater than their previous income	TRUE	No	Neutral	0.705	0.700	0.706
13	In case of war with the U.S., Russia could be destroyed in three hours, Chinese military analysts calculated	FALSE	Yes	Propaganda-inconsistent	0.342	0.400	0.248
14	Putin signs a new law that gives him lifetime immunity and the right to be a lifetime senator	TRUE	Yes	Propaganda-inconsistent	0.262	0.344	0.156
15	A professor in Sweden has suggested getting rid of "conservative taboos" and considering using human meat as food. He thinks that meat obtained from dead bodies could save humanity from food crises	FALSE	Yes	Propaganda-consistent	0.269	0.258	0.325
16	A woman in the U.S. describes how her Soviet upbringing helped her during the pandemic: Her mother from early childhood taught her to wash her hands before eating and after going to the bathroom	TRUE	Yes	Propaganda-consistent	0.826	0.802	0.868
17	Russia billed the U.S. 660,000 dollars for medical and protective equipment. Earlier, Russian authorities had said that the cargo is humanitarian aid	TRUE	Yes	Propaganda-inconsistent	0.471	0.584	0.301
18	In North Ossetia, locals burn a cell tower to the ground. They were afraid that 5G networks would be used to "x-ray" and "chip" them	TRUE	No	Neutral	0.804	0.846	0.775
19	In Italy, several mafia bosses were let out of prison because of the pandemic. Among them is one of the most influential leaders of the Sicilian Cosa Nostra Francesco Bonura who was doing his 23-year stint in prison	TRUE	No	Neutral	0.393	0.379	0.389
20	In Germany, a rating of the most unpleasant tourists was compiled, and Russians are leading. 60% of respondents said that Russian tourists are too noisy, and 50% said that they lack "food etiquette"	TRUE	Yes	Propaganda-inconsistent	0.758	0.776	0.715
21	Documents confirming Trump's links to Russia were obtained from the Deutsche Bank	FALSE	Yes	Propaganda-inconsistent	0.219	0.249	0.178
22	In California, the words "husband," "wife," "groom," and "bride" are banned because of same-sex marriages	FALSE	Yes	Propaganda-consistent	0.644	0.580	0.734
23	Russia adjusts the date of the ending of the Second World War. It will be September 3 now	TRUE	Yes	Propaganda-inconsistent	0.480	0.540	0.389

24	The Central Bank burns one ton of banknotes with denominations of 100 and 500 rubles that were infected by the coronavirus	FALSE	No	Neutral	0.105	0.096	0.101
25	Russian banks moved some employees to work and live in the office. They are promised higher salaries and bonuses	TRUE	No	Neutral	0.369	0.376	0.328
26	The number of Ukrainians who positively perceive Russia has increased by 50% in three years	TRUE	Yes	Propaganda-consistent	0.434	0.371	0.504
27	The State Duma adopts in the first reading a law that will ban giving human names to animals	FALSE	No	Neutral	0.123	0.118	0.109
28	German zoos want to feed some animals to others because due to a lack of visitors they are out of money	FALSE	Yes	Propaganda-consistent	0.278	0.247	0.335
29	Putin awards Kim Jong Un with a medal "75 years of victory in the Great Patriotic War"	TRUE	Yes	Propaganda-inconsistent	0.508	0.569	0.429
30	In Tuva, a man was rescued from a bear's den where he spent a month with a broken spine	FALSE	No	Neutral	0.494	0.524	0.466
31	Zhirinovsky suggests testing the coronavirus vaccine on prisoners	TRUE	Yes	Neutral	0.606	0.656	0.572
32	The wealth of the richest Americans has grown by \$434 billion since March, an analysis of the Forbes ranking shows	TRUE	No	Neutral	0.635	0.661	0.649
33	For the second time, Poroshenko did not arrive for questioning in an investigation about the illegal import of paintings	TRUE	Yes	Propaganda-consistent	0.784	0.766	0.807
34	Merkel refuses to go to Washington for a G7 summit	TRUE	Yes	Neutral	0.544	0.513	0.572
35	Obama's former aide suspects Russia is connected to riots in the U.S.	TRUE	Yes	Propaganda-consistent	0.765	0.748	0.813
36	Hitler's house in Austria will become a police station	TRUE	Yes	Neutral	0.489	0.519	0.437
37	U.S. Attorney General says "foreign forces" intervene in protests in America to escalate violence	TRUE	Yes	Propaganda-consistent	0.746	0.737	0.769
38	A powerful landslide in Norway washes eight houses into the sea	TRUE	No	Neutral	0.773	0.792	0.754
39	Brazil threatens to leave WHO because of "ideological bias"	TRUE	Yes	Neutral	0.597	0.602	0.594
40	Canada's prime minister bends a knee at an anti-racist rally	TRUE	Yes	Neutral	0.699	0.698	0.694
41	In Lviv, a MiG-29 that had arrived for modernization was plundered for parts	TRUE	Yes	Propaganda-consistent	0.460	0.431	0.529

42	In the U.S., a treasure hunter finds a chest with precious stones worth a million dollars. The treasure was hidden ten years ago in the mountains by a local antique dealer	TRUE	No	Neutral	0.598	0.629	0.575
43	Peskov says there are no oligarchs in Russia	TRUE	Yes	Neutral	0.611	0.649	0.508
44	In London, archeologists find the ruins of the first British theatre	TRUE	No	Neutral	0.689	0.701	0.637
45	Ukraine gets the status of NATO enhanced opportunity partner	TRUE	Yes	Propaganda-inconsistent	0.448	0.484	0.382
46	In May, the Polish military occupied a part of the Czech Republic. Poland explains it was an "accident" and a "misunderstanding"	TRUE	Yes	Neutral	0.240	0.238	0.252
47	Kyrgyz prime minister resigns over the radio frequency sale scandal	TRUE	Yes	Neutral	0.409	0.406	0.394
48	A passenger on a train in Switzerland forgot a bag of gold in a car	TRUE	No	Neutral	0.412	0.403	0.392
49	In Putin's residence, a disinfection tunnel is installed to protect from coronavirus. Everyone who passes it is covered with a "dispersed water mist"	TRUE	Yes	Propaganda-inconsistent	0.635	0.659	0.597
50	Protesters in New York poisoned policemen with milkshakes with added bleach	FALSE	Yes	Propaganda-consistent	0.154	0.153	0.151

Note: The last three columns present the proportion of those who evaluated the corresponding story as true in the full sample, among Putin supporters, and among Putin critics, respectively. Stories 1-30 are 'pre-selected,' and stories 31-50 are 'current.' Stories 1-14 and 31-50 included in the first quiz, stories 15-30 included in the second quiz. See the text for details. Story 3 was also included in the nationally representative survey (Study 2). Stories 7, 10, and 11 were also included in the OMI online panel (Study 3).

Putin Supporters Are More Receptive to Propaganda

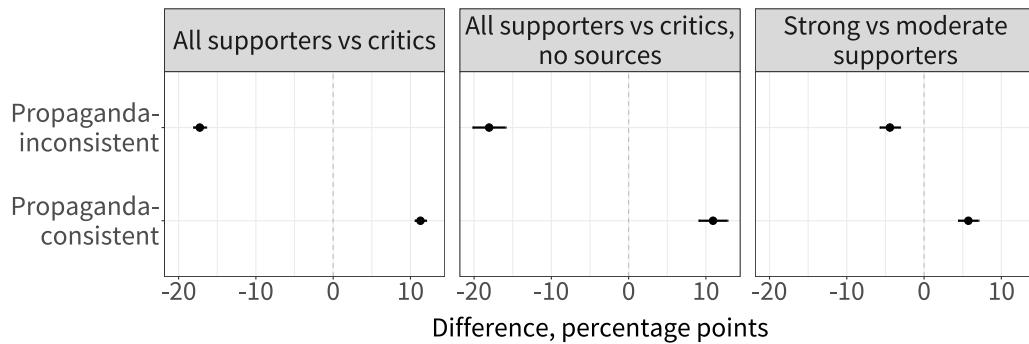


Figure B2: Covariate-adjusted differences in the shares of respondents who found stories credible. Calculated from linear regressions of story evaluations on Putin approval and covariates. Results from the main study. 95% confidence intervals are shown.

Figure B3 compares the differences between Putin critics and supporters in evaluations of selected stories between the main study and the two additional surveys. The story labels refer to the following stories in Table B2: “Growth in Ukraine”—story 3; “Trump and Putin”—story 7; “COVID origins”—story 10; “Nuclear waste”—story 11.

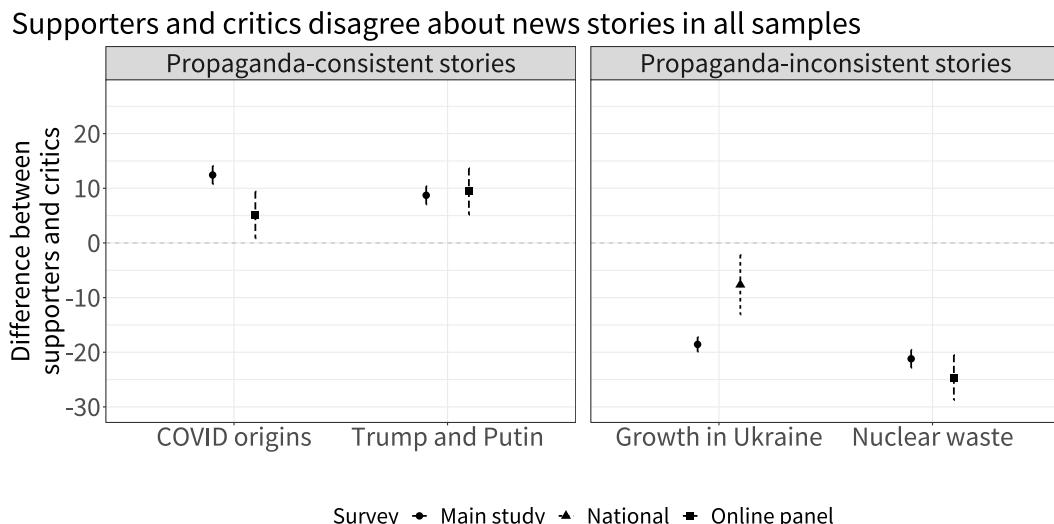


Figure B3: Covariate-adjusted differences in the shares of Putin supporters and critics who found stories credible. Results from Studies 1, 2, and 3. 95% confidence intervals are shown

Balance Check

Table B3: Covariate balance check for the experiment (the main study)

News story	Female	Age group	Higher education	Strong supporter	Strong critic	Moderate supporter	Moderate critic
104	0.287	0.469	0.149	0.887	0.406	0.647	0.336
105	0.953	0.968	0.486	0.507	0.734	0.911	0.767
106	0.245	0.385	0.014	0.445	0.793	0.973	0.575
107	0.539	0.851	0.634	0.036	0.185	0.671	0.430
108	0.222	0.895	0.936	0.990	0.628	0.109	0.400
109	0.222	0.903	0.415	0.340	0.045	0.764	0.085
110	0.054	0.997	0.328	0.992	0.173	0.233	0.709
111	0.816	0.932	0.455	0.455	0.866	0.953	0.763
112	0.782	0.607	0.642	0.919	0.780	0.123	0.227
113	0.981	0.518	0.705	0.483	0.666	0.595	0.161
114	0.516	0.339	0.344	0.818	0.091	0.640	0.691
5221	0.965	0.418	0.380	0.764	0.936	0.288	0.657
5222	0.742	0.517	0.319	0.816	0.125	0.387	0.993
5301	0.105	0.410	0.454	0.656	0.488	0.585	0.340
5302	0.643	0.111	0.842	0.809	0.866	0.638	0.599
6021	0.452	0.132	0.739	0.245	0.500	0.456	0.657
6022	0.936	0.018	0.744	0.505	0.141	0.495	0.140
6041	0.290	0.855	0.432	0.262	0.858	0.885	0.472
6042	0.351	0.913	0.305	0.983	0.054	0.691	0.736
6061	0.901	0.056	0.080	0.711	0.155	0.450	0.833
6062	0.840	0.145	0.143	0.971	0.912	0.852	0.627
6081	0.434	0.552	0.630	0.259	0.887	0.652	0.792
6082	0.170	0.881	0.405	0.467	0.928	0.618	0.730
6101	0.688	0.787	0.902	0.022	0.091	0.012	0.104
6102	0.067	0.929	0.174	0.315	0.233	0.910	0.509
6131	0.302	0.276	0.844	0.262	0.776	0.455	0.984
6132	0.352	0.026	0.151	0.961	0.495	0.987	0.286
6151	0.858	0.506	0.674	0.798	0.583	0.541	0.171
6152	0.144	0.066	0.988	0.389	0.930	0.745	0.611
6161	0.536	0.526	0.667	0.001	0.503	0.716	0.570
6162	0.352	0.154	0.444	0.288	0.329	0.288	0.580

Note: Results of chi-square test for equality of covariate values across treatment groups, by news story. In each column, I provide p-values from chi-squared tests of equality of covariate values across treatment groups (news sources) for the corresponding covariate. See story texts in the list of stories above.

Experimental Results with Other Measures of Pro-Regime Orientations

As discussed in the main text, empirical evidence suggests that Russians are generally truthful when reporting their presidential approval. Nonetheless, I have implemented additional measures to improve the robustness of results. First, I asked the respondents about events or developments in Russian history they are proud of. One of the possible answers was “the reunion with Crimea” (the annexation of Crimea in 2014), very popular among Putin supporters but not among critics. The correlation between presidential approval and pride in the annexation was about 0.48.

Second, in the beginning of the quiz, respondents evaluated two news stories. One reported that the European Union had lost 500 billion euros because of sanctions against Russia (an untrue propaganda statement spread by Vladimir Putin). The other story reported that the Ukrainian economy had been growing faster than the Russian economy (a true story incongruent with common beliefs of government loyalists, as Ukraine was typically portrayed in Russian state media as a failed state). In the quiz, these stories were always attributed to one news source, a news agency *Interfax*.

Then, I combined responses to these two statements in an index that takes the value of 2 if a respondent finds the pro-government EU story to be true and the Ukraine story to be false, the value of 0 if a respondent finds the EU story to be false and the Ukraine story to be true, and the value of 1 if both stories are found to be false or both are found to be true. Larger values are consistent with stronger pro-regime sympathies. The correlation between presidential approval and this measure is about 0.32.

Figure B4 shows the effect of switching from critical to state media depending on pride in Crimea and on feelings toward EU and Ukraine; regression models are in Table B7.

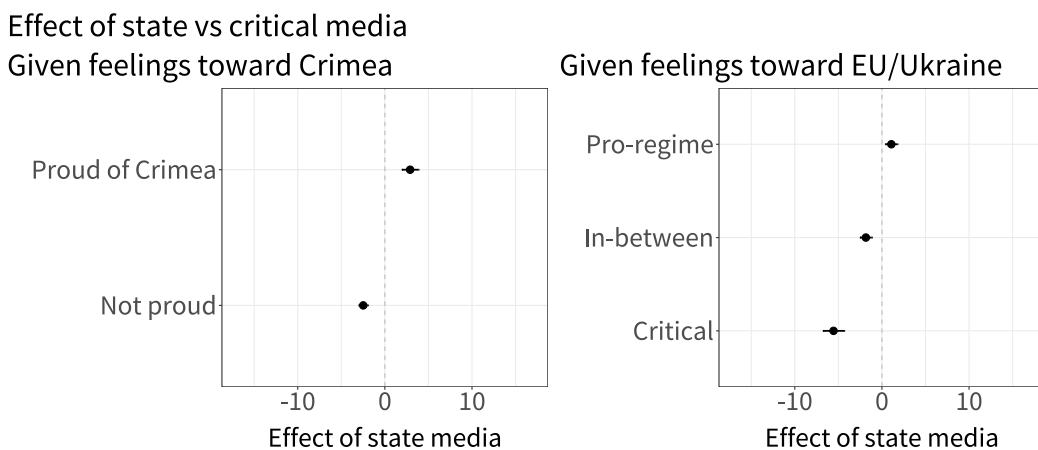


Figure B4: The effect of changing the treatment from critical to state media outlet on evaluations of news stories. Calculations based on a linear regression of news story evaluations, accounting for state control and government support; results from the main study. 95% confidence intervals are shown

Experimental Results by Individual News Sources

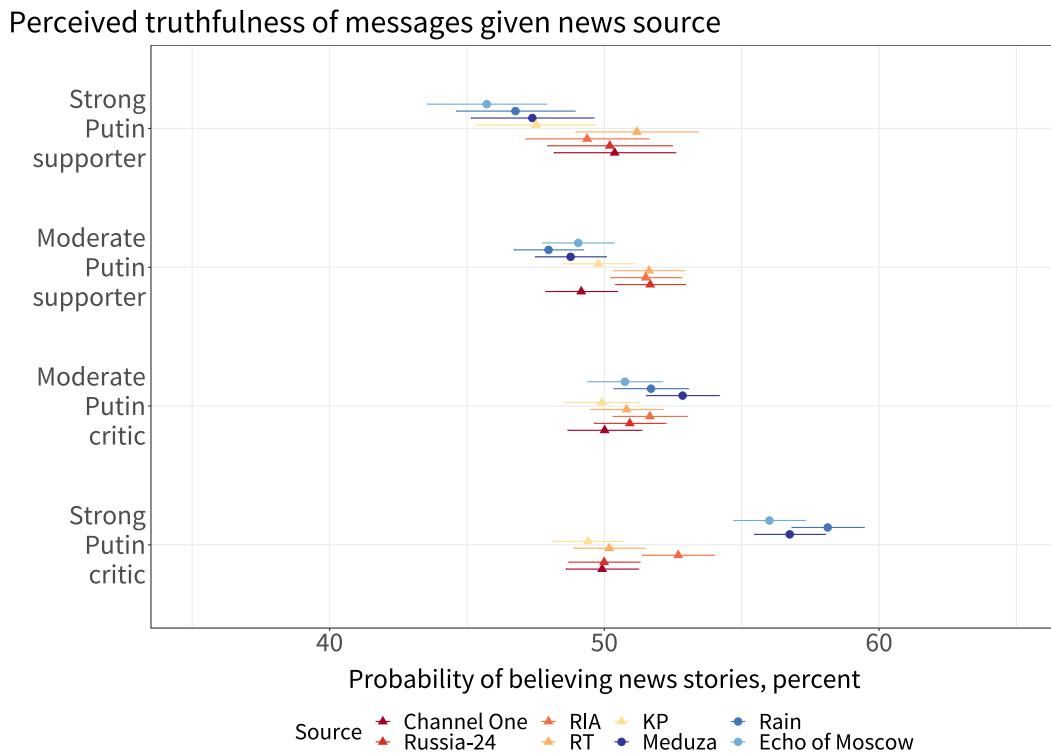


Figure B5: Probability of evaluating news stories as true when they are attributed to specific state-run and critical media outlets, by approval of Vladimir Putin. Calculations based on a linear regression of news story evaluations on media outlet dummies and presidential approval (see text for details); results from the main study. 95% confidence intervals are shown

Experimental Results for Pre-Selected and “Current” News Stories

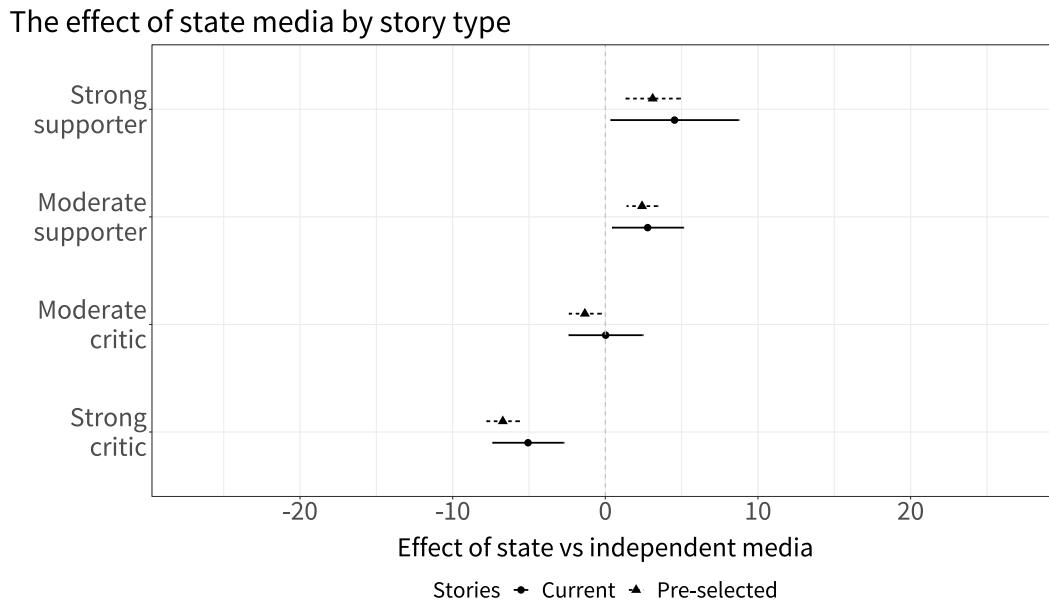


Figure B6: The effect of changing the treatment from critical to state media outlet on evaluations of news stories, by approval of Vladimir Putin and by story type. Calculations based on a linear regression of news story evaluations, accounting for state control and presidential approval; results from the main study. 95% confidence intervals are shown

Experimental Results with Alternative Categorizations of State-Controlled Media Outlets

In additional models, I consider alternative categorization of state-controlled media outlets. In the first model, *RBC* is also a state-controlled media organization. (In the main analysis, *RBC* is a separate category.) In the second model, I consider as state-controlled only those news outlets that are directly owned by the government: *Channel One*, *Russia-24*, *RIA*, and *RT*. *RBC* and *KP* are categorized as “Other.” The results, reported in Figure B7 and in Table B7 below, are very similar to the results in the main text.

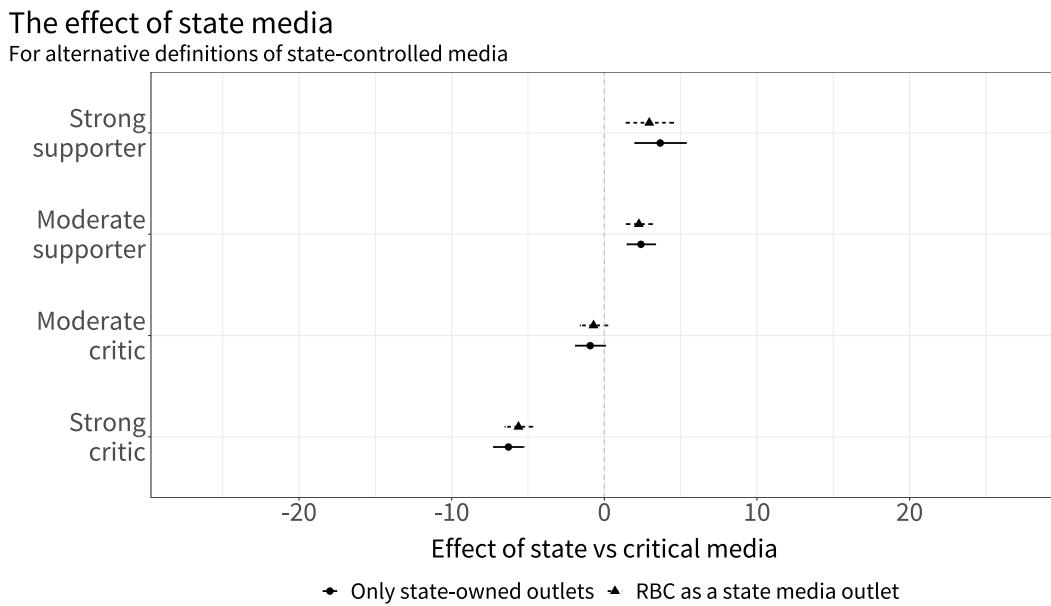


Figure B7: Effect of changing the treatment from critical to state media outlet on evaluations of news stories, by approval of Vladimir Putin. Here, *RBC* is considered as a state-controlled outlet. Calculations based on a linear regression of news story evaluations, accounting for state control and presidential approval; results from the main study. 95% confidence intervals are shown

Regression Tables for the Experiment

Table B4: Treatment effect in the main study

	Model 1	Model 2	Model 3
Intercept	0.374*** (0.014)	0.413*** (0.016)	-0.542*** (0.056)
Source: Critical	0.045*** (0.007)	0.047*** (0.008)	0.200*** (0.028)
Source: State-controlled	-0.020** (0.007)	-0.016* (0.007)	-0.092*** (0.026)
Source: RBC	0.034*** (0.009)	0.034*** (0.009)	0.151*** (0.036)
Somewhat disapprove	-0.021* (0.008)	-0.012 (0.009)	-0.094** (0.032)
Somewhat approve	-0.033*** (0.008)	-0.025** (0.009)	-0.149*** (0.032)
Certainly approve	-0.049*** (0.012)	-0.042*** (0.013)	-0.221*** (0.046)
Story order	0.006*** (0.000)	0.006*** (0.000)	0.025*** (0.001)
Source: Critical*Somewhat disapprove	-0.031** (0.010)	-0.036*** (0.011)	-0.138*** (0.039)
Source: State-controlled*Somewhat disapprove	0.023* (0.010)	0.016 (0.010)	0.104** (0.036)
Source: RBC*Somewhat disapprove	-0.006 (0.013)	-0.010 (0.013)	-0.027 (0.051)
Source: Critical*Somewhat approve	-0.051*** (0.010)	-0.054*** (0.011)	-0.226*** (0.039)
Source: State-controlled*Somewhat approve	0.036*** (0.010)	0.032** (0.010)	0.164*** (0.036)
Source: RBC*Somewhat approve	-0.011 (0.012)	-0.009 (0.013)	-0.048 (0.050)
Source: Critical*Certainly approve	-0.055*** (0.014)	-0.052*** (0.015)	-0.245*** (0.056)
Source: State-controlled*Certainly approve	0.042** (0.014)	0.045** (0.014)	0.189*** (0.052)
Source: RBC*Certainly approve	-0.022 (0.018)	-0.017 (0.018)	-0.096 (0.072)
Age		-0.004*** (0.001)	
Female		-0.027*** (0.003)	
Higher education		0.009* (0.003)	
R ²	0.102	0.103	
Adj. R ²	0.102	0.103	
Num. obs.	198818	182105	198818
RMSE	0.471	0.471	
N Clusters	15626	14100	
AIC			252202.304
BIC			252906.114
Log Likelihood			-126032.152
Deviance			252064.304

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from regression models (OLS in Models 1 and 2, logit in Model 3) with news story evaluations as dependent variables. The reference category in presidential approval is 'Certainly disapprove.' The reference category in source treatments is 'No source.' Data from the social media sample. Story and day fixed effects included. Heteroskedasticity-robust standard errors in parentheses (clustered on respondent).

Table B5: Treatment effect in the main study (individual news sources)

	Model 1
Intercept	0.374 (0.014)***
Source: Meduza	0.043 (0.009)***
Source: Rain	0.057 (0.009)***
Source: Echo of Moscow	0.035 (0.009)***
Source: RBC	0.034 (0.009)***
Source: Channel One	-0.026 (0.009)**
Source: Russia-24	-0.025 (0.009)**
Source: RT	-0.023 (0.009)**
Source: RIA	0.002 (0.009)
Source: KP	-0.031 (0.009)***
Somewhat disapprove	-0.021 (0.008)*
Somewhat approve	-0.033 (0.008)***
Certainly approve	-0.049 (0.012)***
Story order	0.006 (0.000)***
Source: Meduza*Somewhat disapprove	-0.018 (0.012)
Source: Rain*Somewhat disapprove	-0.043 (0.013)***
Source: Echo of Moscow*Somewhat disapprove	-0.032 (0.013)*
Source: RBC*Somewhat disapprove	-0.006 (0.013)
Source: Channel One*Somewhat disapprove	0.022 (0.013)
Source: Russia-24*Somewhat disapprove	0.030 (0.012)*
Source: RT*Somewhat disapprove	0.027 (0.012)*
Source: RIA*Somewhat disapprove	0.011 (0.013)
Source: KP*Somewhat disapprove	0.026 (0.013)*
Source: Meduza*Somewhat approve	-0.047 (0.012)***
Source: Rain*Somewhat approve	-0.068 (0.012)***
Source: Echo of Moscow*Somewhat approve	-0.036 (0.012)**
Source: RBC*Somewhat approve	-0.011 (0.012)
Source: Channel One*Somewhat approve	0.026 (0.012)*
Source: Russia-24*Somewhat approve	0.050 (0.012)***
Source: RT*Somewhat approve	0.048 (0.012)***
Source: RIA*Somewhat approve	0.021 (0.012)
Source: KP*Somewhat approve	0.037 (0.012)**
Source: Meduza*Certainly approve	-0.045 (0.018)*
Source: Rain*Certainly approve	-0.065 (0.017)***
Source: Echo of Moscow*Certainly approve	-0.054 (0.017)**
Source: RBC*Certainly approve	-0.022 (0.018)
Source: Channel One*Certainly approve	0.053 (0.018)**
Source: Russia-24*Certainly approve	0.051 (0.018)**
Source: RT*Certainly approve	0.059 (0.018)***
Source: RIA*Certainly approve	0.016 (0.018)
Source: KP*Certainly approve	0.030 (0.017)
R ²	0.102
Adj. R ²	0.102
Num. obs.	198818
RMSE	0.471
N Clusters	15626

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from linear regressions with news story evaluations as dependent variables. Data from the social media sample. The reference category in presidential approval is 'Certainly disapprove.' The reference category in source treatments is 'No source.' Story and day fixed effects included. Heteroskedasticity-robust standard errors in parentheses (clustered on respondent).

Table B6: Treatment effect in the main study (alternative definitions of state-controlled media)

	Model 1	Model 2
Intercept	0.373*** (0.014)	0.374*** (0.014)
Source: Critical	0.045*** (0.007)	0.045*** (0.007)
Source: State-controlled	-0.011 (0.007)	
Somewhat disapprove	-0.021* (0.008)	-0.021* (0.008)
Somewhat approve	-0.033*** (0.008)	-0.033*** (0.008)
Certainly approve	-0.049*** (0.012)	-0.049*** (0.012)
Story order	0.006*** (0.000)	0.006*** (0.000)
Source: Critical*Somewhat disapprove	-0.031** (0.010)	-0.031** (0.010)
Source: State-controlled*Somewhat disapprove	0.018 (0.009)	
Source: Critical*Somewhat approve	-0.051*** (0.010)	-0.051*** (0.010)
Source: State-controlled*Somewhat approve	0.028** (0.009)	
Source: Critical*Certainly approve	-0.055*** (0.014)	-0.055*** (0.014)
Source: State-controlled*Certainly approve	0.031* (0.013)	
Source: State-owned		-0.018* (0.007)
Source: Other		0.002 (0.008)
Source: State-owned*Somewhat disapprove		0.022* (0.010)
Source: Other*Somewhat disapprove		0.010 (0.011)
Source: State-owned*Somewhat approve		0.036*** (0.010)
Source: Other*Somewhat approve		0.013 (0.011)
Source: State-owned*Certainly approve		0.045** (0.014)
Source: Other*Certainly approve		0.004 (0.015)
R ²	0.101	0.102
Adj. R ²	0.101	0.101
Num. obs.	198818	198818
RMSE	0.471	0.471
N Clusters	15626	15626

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from linear regression models, with news story evaluations as dependent variables. In Model 1, RBC is treated as a state-controlled outlet. In Model 2, state-controlled outlets are divided into 'State-owned' and 'Other.' In Model 1, RBC is treated as a state-controlled outlet. The reference category in presidential approval is 'Certainly disapprove.' The reference category in source treatments is 'No source.' Data from the social media sample. Story and day fixed effects included. Heteroskedasticity-robust standard errors in parentheses (clustered on respondent).

Table B7: Treatment effect in the main study (alternative measures of pro-regime attitudes)

	Model 1	Model 2
Intercept	0.353*** (0.007)	0.384*** (0.009)
Source: Critical	0.021*** (0.004)	0.045*** (0.009)
Source: State-controlled	-0.004 (0.004)	-0.011 (0.008)
Source: RBC	0.025*** (0.005)	0.038*** (0.011)
Proud of Crimea	-0.026*** (0.007)	
Story order	0.006*** (0.000)	0.006*** (0.000)
Source: Critical*Proud of Crimea	-0.027** (0.009)	
Source: State-controlled*Proud of Crimea	0.027** (0.008)	
Source: RBC*Proud of Crimea	0.005 (0.011)	
EU-Ukraine feelings: In-between		-0.042*** (0.008)
EU-Ukraine feelings: Pro-regime		-0.038*** (0.008)
Critical*EU-Ukraine In-between		-0.019 (0.010)
State-controlled*EU-Ukraine In-between		0.019 (0.009)
Source: RBC*EU-Ukraine In-between		-0.004 (0.013)
Source: Critical*EU-Ukraine Pro-regime		-0.052*** (0.010)
Source: State-controlled*EU-Ukraine Pro-regime		0.014 (0.010)
Source: RBC*EU-Ukraine Pro-regime		-0.019 (0.013)
R ²	0.100	0.100
Adj. R ²	0.099	0.100
Num. obs.	242060	250609
RMSE	0.471	0.471
N Clusters	19029	19712

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from linear regressions with news story evaluations as dependent variables. Data from the social media sample. Approval measures: pride in Crimea annexation (Model 1), feelings toward EU and Ukraine (Model 2); see text for details Story and day fixed effects included. Heteroskedasticity-robust standard errors in parentheses (clustered on respondent).

Table B8: Treatment effect in the main study given news story content

	Model 1	Model 2
Intercept	0.509 (0.016)***	0.497 (0.018)***
Source: Critical	0.022 (0.012)	0.065 (0.016)***
Source: State-controlled	-0.035 (0.011)**	0.015 (0.015)
Source: RBC	0.029 (0.015)	0.084 (0.020)***
Somewhat disapprove	-0.095 (0.014)***	0.004 (0.019)
Somewhat approve	-0.182 (0.014)***	0.002 (0.019)
Certainly approve	-0.207 (0.019)***	-0.059 (0.028)*
Story order	0.006 (0.000)***	0.006 (0.000)***
Neutral story	-0.114 (0.014)***	
Pro-government story	-0.240 (0.013)***	
Source: Critical*Somewhat disapprove	-0.021 (0.017)	-0.057 (0.023)*
Source: State-controlled*Somewhat disapprove	0.030 (0.016)	-0.006 (0.022)
Source: RBC*Somewhat disapprove	-0.018 (0.022)	-0.051 (0.030)
Source: Critical*Somewhat approve	-0.027 (0.016)	-0.063 (0.023)**
Source: State-controlled*Somewhat approve	0.054 (0.015)***	0.016 (0.021)
Source: RBC*Somewhat approve	0.004 (0.021)	-0.082 (0.029)**
Source: Critical*Certainly approve	-0.056 (0.023)*	-0.045 (0.034)
Source: State-controlled*Certainly approve	0.013 (0.022)	0.051 (0.032)
Source: RBC*Certainly approve	-0.056 (0.029)	0.012 (0.043)
Source: Critical*Neutral story	0.033 (0.017)	
Source: State-controlled*Neutral story	0.027 (0.016)	
Source: RBC*Neutral story	0.016 (0.021)	
Source: Critical*Pro-government story	0.030 (0.015)*	
Source: State-controlled*Pro-government story	0.017 (0.014)	
Source: RBC*Pro-government story	0.003 (0.020)	
Somewhat disapprove*Neutral story	0.081 (0.020)***	
Somewhat approve*Neutral story	0.158 (0.019)***	
Certainly approve*Neutral story	0.102 (0.028)***	
Somewhat disapprove*Pro-government story	0.134 (0.017)***	
Somewhat approve*Pro-government story	0.274 (0.017)***	
Certainly approve*Pro-government story	0.350 (0.027)***	
Source: Critical*Somewhat disapprove*Neutral story	-0.016 (0.024)	
Source: State-controlled*Somewhat disapprove*Neutral story	-0.012 (0.022)	
Source: RBC*Somewhat disapprove*Neutral story	0.018 (0.031)	
Source: Critical*Somewhat approve*Neutral story	-0.045 (0.023)*	
Source: State-controlled*Somewhat approve*Neutral story	-0.035 (0.021)	
Source: RBC*Somewhat approve*Neutral story	-0.017 (0.030)	
Source: Critical*Certainly approve*Neutral story	0.024 (0.033)	
Source: State-controlled*Certainly approve*Neutral story	0.061 (0.031)*	
Source: RBC*Certainly approve*Neutral story	0.063 (0.042)	
Source: Critical*Somewhat disapprove*Pro-government story	-0.011 (0.022)	
Source: State-controlled*Somewhat disapprove*Pro-government story	-0.010 (0.020)	
Source: RBC*Somewhat disapprove*Pro-government story	0.018 (0.029)	
Source: Critical*Somewhat approve*Pro-government story	-0.026 (0.022)	
Source: State-controlled*Somewhat approve*Pro-government story	-0.017 (0.020)	
Source: RBC*Somewhat approve*Pro-government story	-0.026 (0.028)	
Source: Critical*Certainly approve*Pro-government story	-0.021 (0.032)	
Source: State-controlled*Certainly approve*Pro-government story	0.029 (0.030)	
Source: RBC*Certainly approve*Pro-government story	0.038 (0.041)	
Pre-selected story		-0.128 (0.014)***
Source: Critical*Pre-selected story		-0.025 (0.017)
Source: State-controlled*Pre-selected story		-0.041 (0.016)*
Source: RBC*Pre-selected story		-0.058 (0.022)**
Somewhat disapprove*Pre-selected story		-0.029 (0.020)
Somewhat approve*Pre-selected story		-0.041 (0.020)*
Certainly approve*Pre-selected story		0.013 (0.029)
Source: Critical*Somewhat disapprove*Pre-selected story		0.031 (0.025)
Source: State-controlled*Somewhat disapprove*Pre-selected story		0.034 (0.023)
Source: RBC*Somewhat disapprove*Pre-selected story		0.053 (0.032)
Source: Critical*Somewhat approve*Pre-selected story		0.012 (0.025)
Source: State-controlled*Somewhat approve*Pre-selected story		0.025 (0.023)
Source: RBC*Somewhat approve*Pre-selected story		0.084 (0.032)**
Source: Critical*Certainly approve*Pre-selected story		-0.013 (0.036)
Source: State-controlled*Certainly approve*Pre-selected story		-0.011 (0.033)
Source: RBC*Certainly approve*Pre-selected story		-0.037 (0.045)
R ²	0.019	0.020
Adj. R ²	0.019	0.020
Num. obs.	198818	198818
RMSE	0.492	0.492
N Clusters	15626	15626

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from linear regressions with news story evaluations as dependent variables. Data from the social media sample. The reference category in presidential approval is 'Certainly disapprove.' The reference category in story content in Model 1 is 'Critical story.' The reference category in story content in Model 2 is 'Recent story.' Story and day fixed effects included. Heteroskedasticity-robust standard errors in parentheses (clustered on respondent).

Online Appendix C: Additional Evidence From the Nationally Representative Survey (Study 2)

For practical reasons, the study on a nationally representative sample included three news stories from the online survey (two of them were shown in two versions; see below) and only two news sources, assigned randomly with an approximately equal probability: *Channel One*, the main state-run television station, and *Echo of Moscow*, a liberal radio station/website. Respondents saw the logo of either *Channel One*, or *Echo of Moscow*, and interviewers emphasized the name of the news organization before each news story. After each vignette, respondents were asked to evaluate the truthfulness of the message on a scale from 0 to 3 (rescaled in the analysis to take values from 0 to 1).

The experimental vignettes and treatments were embedded in a nationally representative omnibus survey conducted monthly by a Russian polling firm, Levada Center. The omnibus survey uses in-home visits and relies on random sampling of the Russian population using a multi-stage sampling procedure (first randomly selecting urban and rural areas, then randomly selecting sampling stations within these primary sampling units, then randomly selecting households and individuals within households). The sample is stratified by sociodemographic characteristics based on the recent census data and on the recent demographic statistics, and weights are provided to further adjust for the discrepancies between the sample and the Russian population. The survey was fielded on August 22–28, 2019, covering 140 cities, towns, and rural settlements in 50 Russian regions. The sample size is 1608 respondents.

News Stories in the National Survey

Economic struggles, version 1 (the Russian statistical agency, Rosstat, is not mentioned). *For 80% of Russian families, it is difficult to buy all the necessary goods and “make ends meet”. More than half of the families cannot replace the simplest furniture that falls into disrepair.*

Economic struggles, version 2 (Rosstat is mentioned). *For 80% of Russian families, it is difficult to buy all the necessary goods and “make ends meet.” This is what new research by the Federal service of government statistics says. More than half of the families cannot replace the simplest furniture that falls into disrepair. (This version implies that the government has admitted the problem.)*

Ukrainian economy, version 1 (Russia is not mentioned). *The Ukrainian economy is growing at a slower rate than the world economy. According to analysts, in 2019, the world’s GDP will grow by almost 4 percent, and the Ukrainian GDP by less than 3 percent.*

Ukrainian economy, version 2 (Russia is mentioned). *The Ukrainian economy is growing at a slower rate than the world economy, but faster than the Russian economy. According to analysts, in 2019 the world’s GDP will grow by almost 4 percent, Ukrainian GDP by less than 3 percent, and Russian GDP by only 1.6 percent. The Ukrainian economy has been growing faster than the Russian economy for the fourth year in a row. (This version is more politicized by*

including a direct comparison with Russia.)

U.S. submarine. *The U.S. submarine Hartford froze into Arctic ice during military exercises. The submarine was supposed to rehearse a Tomahawk launch against a hypothetical aggressor—Russian ships. But something went wrong, and the submarine could not rise to the surface. A helicopter had to be called in order to save the vessel from the captivity of ice. (This is a fake story fabricated by the Russian state propaganda.)*

The Effect of State-Run Media, by Putin Approval

Figure C1 shows the estimated effect of changing the treatment from *Echo of Moscow* to *Channel One*. In the left panel, regime support is measured as respondent's vote choice in the last presidential election in order to account for the differences between different groups of Putin critics: liberal and pro-Western individuals, who are more likely to see the liberal-leaning *Echo of Moscow* as like-minded, and nationalists or communists. In the right panel, regime support is measured as approval of Vladimir Putin. Also see Table C1.

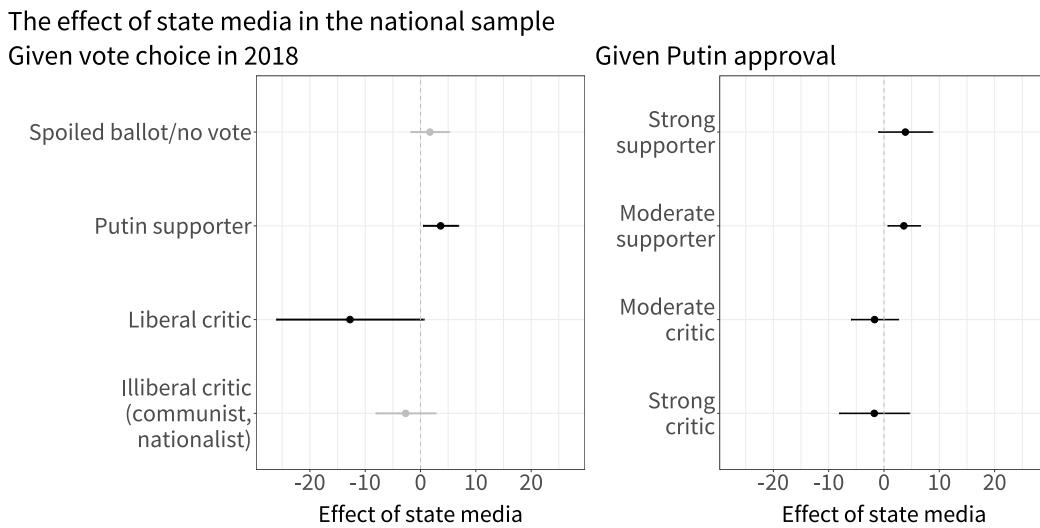


Figure C1: The effect of changing the treatment from critical (*Echo of Moscow*) to state-run (*Channel One*) media outlet on evaluations of news stories, by respondent's vote in the 2018 presidential election or by approval of Vladimir Putin. Calculations based on a linear regression of news story evaluations, accounting for state control, 2018 vote/Putin approval, and demographic covariates (see text for details); results from the national survey (Study 2). 95% confidence intervals are shown

Regression Table for the Experiment

Table C1: Treatment effect in the nationally representative survey

	Model 1	Model 2
Intercept	0.738*** (0.035)	0.755*** (0.036)
Channel One	-0.018 (0.032)	-0.027 (0.028)
Female	0.045*** (0.012)	0.046*** (0.012)
Age	0.000 (0.000)	0.000 (0.000)
Education	-0.008* (0.004)	-0.008 (0.004)
Somewhat disapprove	0.019 (0.030)	
Somewhat approve	-0.041 (0.026)	
Certainly approve	-0.056 (0.030)	
Channel One*Somewhat disapprove	0.001 (0.039)	
Channel One*Somewhat approve	0.053 (0.036)	
Channel One*Certainly approve	0.056 (0.041)	
Voted liberal		0.086 (0.049)
Voted for Putin		-0.067** (0.025)
Spoiled ballot/no vote		-0.044 (0.027)
Channel One*Liberal		-0.101 (0.073)
Channel One*Putin		0.063* (0.032)
Channel One*No vote		0.044 (0.033)
R ²	0.186	0.185
Adj. R ²	0.182	0.181
Num. obs.	3302	3166
RMSE	0.301	0.302
N Clusters	1533	1473

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from linear regressions with news story evaluations as dependent variables. In Model 1, regime support is measured via presidential approval. In Model 2, regime support is measured via vote outcome in the 2018 presidential election. The reference category in presidential approval is 'Certainly disapprove.' The reference category in 2018 vote is 'Communist/nationalist.' Data from the Levada sample Story fixed effects included. Heteroskedasticity-robust standard errors in parentheses (clustered on respondent).

Online Appendix D: Additional Evidence From the OMI Online Panel (the Media Perceptions Survey, Study 3)

Questions About Individual News Sources

[These questions were asked for the following news outlets: RT, Channel One, Russia-24, RIA]

Would you say that these outlets provide a full sense of what is happening, do not ignore important topics or facts?

Mostly yes; Often ignore something important; Do not know the outlet well/difficult to say

Would you say that these outlets provide accurate and truthful information?

Mostly yes; Often provide false or inaccurate information; Do not know the outlet well/difficult to say

Would you say that these outlets are politically unbiased, convey information in a neutral fashion?

Mostly yes; Mostly convey information from the standpoint of the authorities; Mostly criticize the authorities; Do not know the outlet well/difficult to say

Would you say that these outlets are independent in their editorial policies, they themselves decide what and how to cover?

Mostly yes; The authorities decide for them; Do not know the outlet well/difficult to say

Regression Tables for the Media Perceptions Survey

Table D1: State and critical media usage

	Main study			OMI survey			National survey	
	State media	State TV	Critical	State media	State TV	Critical	State TV	Critical
Intercept	0.401*** (0.021)	0.070*** (0.018)	0.700*** (0.021)	0.506*** (0.032)	0.214*** (0.033)	0.249*** (0.033)	0.339*** (0.055)	0.468*** (0.061)
Somewhat disapprove	0.202*** (0.020)	0.204*** (0.017)	-0.213*** (0.019)	0.149*** (0.028)	0.182*** (0.031)	-0.090*** (0.029)	0.146*** (0.044)	-0.127** (0.045)
Somewhat approve	0.323*** (0.019)	0.374*** (0.018)	-0.327*** (0.019)	0.223*** (0.026)	0.340*** (0.029)	-0.168*** (0.027)	0.269*** (0.038)	-0.085* (0.041)
Certainly approve	0.392*** (0.025)	0.508*** (0.025)	-0.408*** (0.024)	0.262*** (0.027)	0.392*** (0.032)	-0.177*** (0.030)	0.255*** (0.040)	-0.140*** (0.043)
Age	0.002 (0.003)	0.016*** (0.003)	-0.008*** (0.003)	0.046*** (0.006)	0.058*** (0.007)	0.013 (0.007)	0.006*** (0.001)	-0.002** (0.001)
Female	0.009 (0.015)	0.042*** (0.014)	-0.124*** (0.015)	0.027 (0.016)	0.074*** (0.020)	-0.038* (0.018)	0.027 (0.020)	-0.054* (0.025)
Education	0.035*** (0.011)	-0.002 (0.011)	0.125*** (0.011)	-0.015 (0.017)	-0.021 (0.020)	0.107*** (0.017)	-0.004 (0.007)	0.017* (0.008)
R ²	0.093	0.157	0.138	0.084	0.124	0.045	0.126	0.027
Adj. R ²	0.092	0.157	0.138	0.081	0.122	0.042	0.122	0.023
Num. obs.	14414	14414	14414	2114	2114	2114	1560	1541

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from a linear regression with state and independent media usage as dependent variables. Data from the main study, media perceptions survey (OMI), and the nationally representative survey (Levada). In the regressions for main study and for the OMI survey, education is dichotomized, and age is an ordinal measure. Heteroskedasticity-robust standard errors in parentheses.

Table D2: Trust in state and critical media

	State media	State TV	Critical
Intercept	0.500*** (0.033)	0.173*** (0.032)	0.292*** (0.030)
Somewhat disapprove	0.184*** (0.030)	0.172*** (0.028)	-0.118*** (0.028)
Somewhat approve	0.353*** (0.027)	0.411*** (0.027)	-0.236*** (0.025)
Certainly approve	0.427*** (0.027)	0.583*** (0.030)	-0.262*** (0.026)
Female	0.048** (0.017)	0.114*** (0.020)	-0.036* (0.015)
Age	0.015* (0.006)	0.013 (0.008)	0.001 (0.006)
Higher education	-0.065*** (0.017)	-0.078*** (0.020)	0.073*** (0.015)
R ²	0.142	0.178	0.079
Adj. R ²	0.140	0.176	0.077
Num. obs.	2114	2114	2114

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from a linear regression with trust in state and independent media as dependent variables. Data from the OMI survey (media perceptions survey). Heteroskedasticity-robust standard errors in parentheses.

Table D3: State and critical media evaluations: Completeness

	RT	Channel 1	Russia-24	RIA
Y: Intercept	-0.216 (0.168)	1.869 (0.313)***	1.499 (0.270)***	0.163 (0.171)
Y: Critic	-0.730 (0.113)***	-2.115 (0.214)***	-1.595 (0.181)***	-0.584 (0.114)***
Y: Female	-0.918 (0.110)***	0.368 (0.198)	0.188 (0.176)	-0.238 (0.112)*
Y: Age	0.042 (0.042)	0.319 (0.082)***	0.340 (0.073)***	0.113 (0.043)**
Y: Higher education	0.333 (0.112)**	-0.480 (0.201)*	-0.219 (0.178)	0.261 (0.113)*
N: Intercept	-0.732 (0.177)***	1.565 (0.302)***	0.930 (0.268)***	-0.493 (0.179)**
N: Critic	0.588 (0.113)***	-0.370 (0.203)	0.115 (0.178)	0.730 (0.114)***
N: Female	-0.869 (0.112)***	0.044 (0.186)	-0.136 (0.170)	-0.560 (0.113)***
N: Age	-0.038 (0.043)	0.317 (0.078)***	0.280 (0.071)***	0.160 (0.044)***
N: Higher education	0.409 (0.114)***	0.037 (0.190)	0.183 (0.173)	0.270 (0.114)*
AIC	4194.789	3242.922	3495.025	4430.072
BIC	4251.353	3299.486	3551.588	4486.635
Log Likelihood	-2087.395	-1611.461	-1737.513	-2205.036
Deviance	4174.789	3222.922	3475.025	4410.072
Num. obs.	2114	2114	2114	2114
K	3	3	3	3

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from multinomial regressions with media evaluations as dependent variables. Outcomes: Mostly complete (Y in the table), Omits important information (N in the table), and Hard to say (reference category). Data from the OMI survey (media perceptions survey). Standard errors in parentheses.

Table D4: State and critical media evaluations: Accuracy

	RT	Channel 1	Russia-24	RIA
Y: Intercept	-0.035 (0.162)	1.956 (0.310)***	1.609 (0.264)***	0.280 (0.165)
Y: Critic	-0.613 (0.108)***	-1.849 (0.206)***	-1.299 (0.173)***	-0.437 (0.110)***
Y: Female	-0.960 (0.106)***	0.041 (0.199)	-0.071 (0.173)	-0.239 (0.108)*
Y: Age	0.032 (0.040)	0.355 (0.082)***	0.303 (0.070)***	0.067 (0.042)
Y: Higher education	0.357 (0.108)***	-0.498 (0.203)*	-0.161 (0.174)	0.294 (0.109)**
N: Intercept	-0.995 (0.189)***	1.396 (0.304)***	0.841 (0.268)**	-0.836 (0.187)***
N: Critic	0.972 (0.122)***	0.126 (0.199)	0.633 (0.175)***	1.018 (0.120)***
N: Female	-0.964 (0.118)***	-0.261 (0.191)	-0.489 (0.172)**	-0.592 (0.117)***
N: Age	-0.062 (0.045)	0.297 (0.080)***	0.226 (0.070)**	0.152 (0.045)***
N: Higher education	0.576 (0.120)***	0.029 (0.195)	0.128 (0.173)	0.290 (0.118)*
AIC	4158.796	3230.442	3436.410	4391.247
BIC	4215.359	3287.006	3492.974	4447.811
Log Likelihood	-2069.398	-1605.221	-1708.205	-2185.624
Deviance	4138.796	3210.442	3416.410	4371.247
Num. obs.	2114	2114	2114	2114
K	3	3	3	3

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from multinomial regressions with media evaluations as dependent variables. Outcomes: Mostly accurate (Y in the table), Often gives false information (N in the table), and Hard to say (reference category). Data from the OMI survey (media perceptions survey). Standard errors in parentheses.

Table D5: State and critical media evaluations: Independence

	RT	Channel 1	Russia-24	RIA
Y: Intercept	-0.072 (0.166)	1.278 (0.283)***	1.344 (0.259)***	-0.015 (0.175)
Y: Critic	-0.605 (0.112)***	-1.597 (0.201)***	-1.369 (0.177)***	-0.548 (0.118)***
Y: Female	-0.853 (0.109)***	-0.138 (0.186)	-0.252 (0.170)	-0.340 (0.115)**
Y: Age	0.019 (0.042)	0.204 (0.075)**	0.163 (0.067)*	0.082 (0.044)
Y: Higher education	0.365 (0.111)**	-0.551 (0.190)**	-0.361 (0.172)*	0.142 (0.116)
N: Intercept	-0.757 (0.176)***	1.437 (0.257)***	1.347 (0.241)***	-0.473 (0.169)**
N: Critic	0.869 (0.113)***	0.356 (0.164)*	0.463 (0.153)**	0.740 (0.107)***
N: Female	-0.955 (0.111)***	-0.193 (0.165)	-0.453 (0.155)**	-0.438 (0.107)***
N: Age	-0.016 (0.042)	0.250 (0.067)***	0.187 (0.061)**	0.158 (0.041)***
N: Higher education	0.525 (0.113)***	-0.114 (0.169)	-0.006 (0.157)	0.129 (0.108)
AIC	4273.702	3009.900	3356.703	4444.885
BIC	4330.265	3066.463	3413.267	4501.448
Log Likelihood	-2126.851	-1494.950	-1668.352	-2212.442
Deviance	4253.702	2989.900	3336.703	4424.885
Num. obs.	2114	2114	2114	2114
K	3	3	3	3

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from multinomial regressions with media evaluations as dependent variables. Outcomes: Mostly independent from authorities (Y in the table), Not independent (N in the table), and Hard to say (reference category). Data from the OMI survey (media perceptions survey). Standard errors in parentheses.

Table D6: State and critical media evaluations: Political bias

	RT	Channel 1	Russia-24	RIA
Anti: Intercept	-2.735 (0.410)***	-1.039 (0.619)	-1.176 (0.592)*	-3.313 (0.456)***
Anti: Critic	-0.020 (0.256)	-0.347 (0.397)	0.035 (0.398)	0.152 (0.276)
Anti: Female	-0.708 (0.258)**	0.542 (0.421)	-0.304 (0.395)	0.035 (0.280)
Anti: Age	0.049 (0.098)	-0.188 (0.174)	-0.076 (0.168)	0.197 (0.105)
Anti: Higher education	0.552 (0.270)*	-0.166 (0.399)	-0.298 (0.398)	0.381 (0.290)
Y: Intercept	-0.186 (0.176)	1.545 (0.308)***	1.232 (0.278)***	-0.041 (0.179)
Y: Critic	-0.741 (0.118)***	-1.710 (0.211)***	-1.294 (0.186)***	-0.412 (0.118)***
Y: Female	-0.951 (0.116)***	-0.064 (0.201)	-0.143 (0.184)	-0.392 (0.117)***
Y: Age	0.037 (0.044)	0.182 (0.082)*	0.247 (0.074)***	0.074 (0.046)
Y: Higher education	0.413 (0.117)***	-0.310 (0.202)	-0.176 (0.183)	0.201 (0.119)
Pro: Intercept	-0.387 (0.171)*	1.614 (0.284)***	1.245 (0.261)***	-0.448 (0.170)**
Pro: Critic	0.467 (0.110)***	-0.130 (0.184)	0.093 (0.169)	0.470 (0.108)***
Pro: Female	-1.106 (0.110)***	-0.222 (0.181)	-0.421 (0.170)*	-0.500 (0.108)***
Pro: Age	-0.024 (0.042)	0.300 (0.075)***	0.311 (0.069)***	0.218 (0.042)***
Pro: Higher education	0.541 (0.112)***	0.184 (0.182)	0.264 (0.169)	0.139 (0.109)
AIC	4714.292	3222.130	3592.227	4900.644
BIC	4799.137	3306.975	3677.072	4985.489
Log Likelihood	-2342.146	-1596.065	-1781.113	-2435.322
Deviance	4684.292	3192.130	3562.227	4870.644
Num. obs.	2114	2114	2114	2114
K	4	4	4	4

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$. Estimates from multinomial regressions with media evaluations as dependent variables. Outcomes: Mostly neutral (Y in the table), Anti-government (Anti in the table), Pro-government (Pro in the table), and Hard to say (reference category). Data from the OMI survey (media perceptions survey). Standard errors in parentheses.

Media Usage

In all three surveys, I asked respondents to report the media outlets that they typically use to learn the news, and then I constructed dummy variables that indicate whether a respondent uses any of state-run television stations or any of critical news outlets. Then, I regressed these dummies on presidential approval and covariates, using the same model setup as with the analysis of media trust. Figure D1 plots the probabilities of using state-run television and foreign or critical media outlets across three samples.²¹ Also see Table D1.

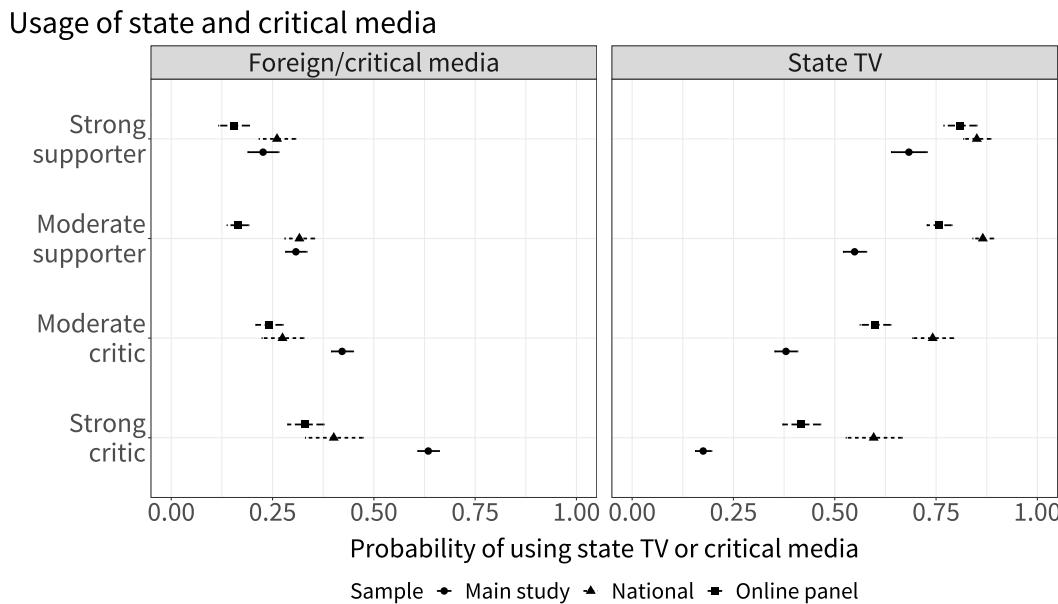


Figure D1: The probability of using critical media and state television, by approval of Vladimir Putin. Calculation based on linear regressions of media usage (dummy variables) on presidential approval and demographic covariates; results from the main study, from the nationally representative sample (Study 2), and from the OMI online panel (Study 3). 95% confidence intervals are shown

²¹In the Levada survey, the definition of critical media is somewhat different: instead of naming specific news outlets, respondents indicated the usage of online/cable television channels (*Rain* and *RBC*), business news outlets (most of which are editorially independent), and foreign websites. Combining these three categories, we can obtain an approximation for the usage of critical media, which, however, somewhat overstates it, as *RBC* and some other business news outlets are influenced by the government.

Knowledge of Critical Media and Trust in/Usage of State Media

Figure D2 shows the predicted probabilities of trust in state television and the usage of state television among supporters depending on whether they know of any critical news outlets or not (data from the OMI survey). The model builds on Figures 5 and D1, adding an interaction between approval and knowledge of critical media. Strong supporters trust state television a great deal regardless of their awareness of critical outlets. Moderate supporters who are aware of critical media may trust state television somewhat less, although the confidence intervals for two estimates overlap. The usage of state television similarly does not depend much on the knowledge of critical media.

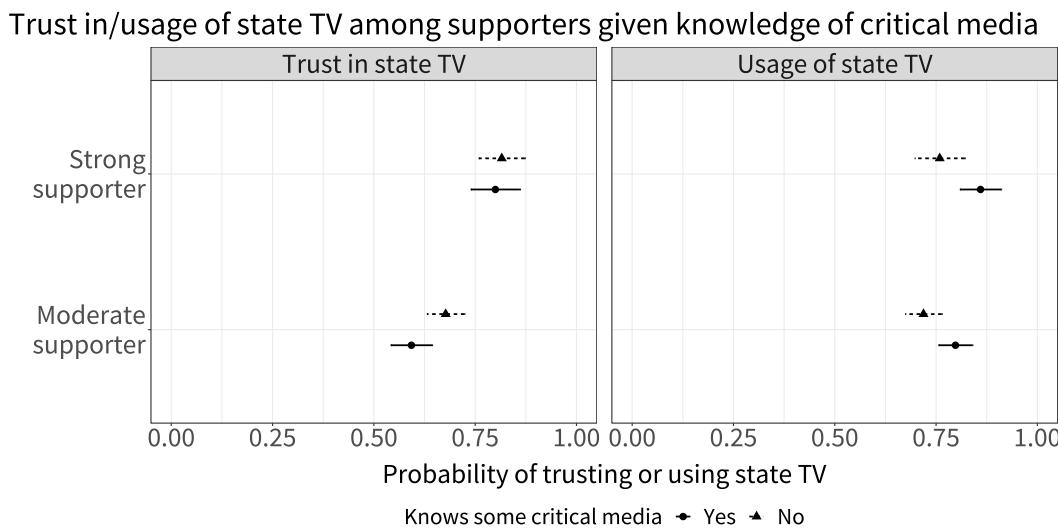


Figure D2: Probability of trusting or using state media depending on knowledge of critical media. Calculation based on a linear regression of media trust or media usage (dummy variables) on presidential approval, knowledge of critical media, and demographic covariates; results from the OMI online panel (Study 3). 95% confidence intervals are shown

Knowledge of Critical Media and the Evaluations of State Media

The models here are analogous to the analysis of perceptions of accuracy and media bias in the main text; in this case, I add an interaction between approval and knowledge of critical media and control for the knowledge of the state media outlet in question.

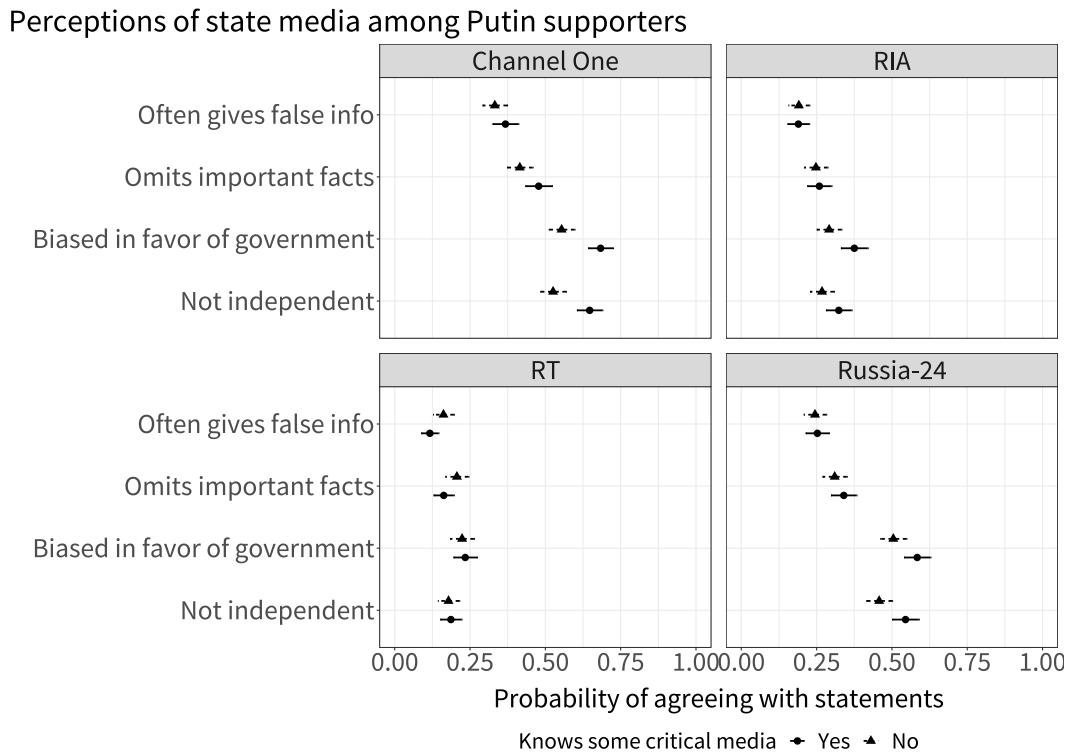


Figure D3: Probability that Putin supporters evaluate state media negatively along various dimensions. Calculations based on multinomial regressions of news source evaluations on knowledge of Echo of Moscow and covariates (see text for details); results from the OMI online panel (Study 3). 95% confidence intervals are shown