Rethinking Propaganda

How State Media Build Trust Through Belief Affirmation

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Abstract

Research on propaganda often focuses on strategies that autocrats can use to persuade skeptical citizens. I argue the role of persuasion in authoritarian rule is overemphasized, and I describe a different function of propaganda—reinforcing regime support and building trust through identity-consistent messages. Such affirmation propaganda results in more positive perceptions of propaganda outlets and 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 underestimate the extent of disinformation and censorship in state media despite often recognizing the pro-government bias of these outlets. One implication of this analysis is that the threat of independent media to autocrats is commonly exaggerated. However, autocrats themselves often fail to change public opinion; instead, they have to cater to existing beliefs of their supporters.

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Many autocracies today extensively use propaganda via state media and social media (Guriev and Treisman 2019; King, Pan, and Roberts 2017; Gehlbach 2010; Rozenas and Stukal 2019), and yet, how propaganda works remains far from clear. Scholars of autocracies often posit that citizens of these regimes are adept at detecting manipulation and capable of processing media messages critically (Wedeen 1999; Mickiewicz 2008; Rosenfeld 2018; Simonov and Rao 2022). How, then, can propaganda succeed against such purported skepticism? A common response in the literature is that autocrats employ a variety of cleverly designed strategies to make propaganda more persuasive (Stockmann and Gallagher 2011; Gehlbach and Sonin 2014; Rozenas and Stukal 2019; Gehlbach 2010; Tolz and Teper 2018; Carter and Carter 2023). Other work, on the contrary, argues that persuasion is unlikely to succeed when the public is skeptical; instead, autocrats use propaganda to induce desired behavior through threats, uncertainty, or signals of dominance (Huang 2015; Little 2017; Huang and Cruz 2022).

While scholars may disagree about the "optimal" solution to citizens' skepticism, most of the work on authoritarian information manipulation implicitly assumes that propaganda is imposed from above. Such a view, however, may be too simplistic and mechanistic. It does not square well with a recent understanding in research on media and political communication that changing beliefs and attitudes is difficult (Taber and Lodge 2006; Bullock et al. 2015; Nyhan and Reifler 2010), and that to win audiences and maintain credibility, media have to cater to consumers' existing worldviews (Gentzkow and Shapiro 2006). A top-down approach to propaganda also does not explain why so many citizens in autocracies consume biased state media. For example, throughout the two decades of Vladimir Putin's rule, an overwhelming majority of Russians continued to get their news from propagandistic state-run outlets (Levada Center 2020), even as independent media were freely available online, and most Russians were active internet users.

In this paper, I suggest a rethinking of the role that propaganda plays in authoritarian regimes. I argue that it can not only intimidate or persuade, but also satisfy the public's

demand for political ideas and narratives. To that end, propaganda can craft its message around regime supporters' existing beliefs, repeating and affirming the views that this public already holds. Such *affirmation propaganda* offers citizens emotional comfort, acknowledging their concerns and validating their identities. Moreover, pro-regime citizens view state-run media, which provide identity-consistent reporting, as more trustworthy than independent information sources that offer more critical reporting. Essentially, citizens reciprocate belief-affirming messages from the regime by *choosing* to stay in the echo chambers of propaganda. Thus, propaganda can be seen as a form of authoritarian responsiveness (J. Chen, Pan, and Xu 2016) that improves regime's stability and its day-to-day functioning. While propaganda undoubtedly seeks to manipulate the public, it may also offer something of value to citizens.

This characterization of propaganda builds on a crucial recent insight: autocrats may enjoy genuine and long-standing mass support (Greene and Robertson 2019; Matovski 2021). While traditionally, political science has viewed autocracy as "minority rule" (Przeworski 2022), a strong support base changes the calculus for autocrats, making it more important to reinforce the connection with existing supporters and maintain their trust than to persuade the skeptics or intimidate potential protesters. Moreover, I argue that making propaganda more appealing to the skeptical public may be counterproductive—such efforts can backfire among regime supporters.

I test this theory of propaganda in Russia under the rule of Vladimir Putin, a prime example of an "informational autocrat" (Guriev and Treisman 2019; Gehlbach 2010; Lipman, Kachkaeva, and Poyker 2018). Over time, Putin has accumulated control over the mainstream media (Enikolopov, Petrova, and Zhuravskaya 2011; Lipman, Kachkaeva, and Poyker 2018), and his regime has used propaganda extensively both domestically and abroad. Recently, Putin's propaganda machine came into spotlight as it aided the Kremlin in its war on Ukraine, prompting Russians to adopt the most absurd lies about the neighboring country, often despite personal testimonies of their Ukrainian relatives (Hopkins

2022). As detailed below, my results help us better understand Russians' receptivity to Kremlin-sponsored disinformation.

My analysis is based on three related studies, including a unique large-scale online experiment ($n \approx$ 15,600) in which Russians attempted to guess whether various 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 messages. 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 citizens sympathetic to Putin were substantially more likely than opposition-minded respondents to believe pro-regime messages, but these regime supporters were much more skeptical about critical messages, typically published by independent media. At the same time, propaganda was most easily accepted when it spoke directly to regime supporters' core beliefs.

Further, I experimentally show that state propaganda outlets elicit greater trust among regime supporters than do independent media: pro-Putin respondents were more likely to believe news messages when these messages were randomly attributed to a state source than when the same messages were attributed to an independent news source. I replicate this result in a survey experiment on a nationally representative sample ($n \approx$ 1,600).

At the same time, Putin supporters no longer viewed state media outlets as more credible when these outlets purportedly published critical messages. Thus, paradoxically, more "balanced" and "accurate" propaganda can alienate the regime's existing support base and damage trust in state media.

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.

Overall, my study documents that citizens of autocracies can genuinely prefer propaganda to more balanced and independent news reporting, and skepticism about propaganda is far less widespread in authoritarian societies than many scholars believe. My findings are related to the previous research that described how citizens can find value in state propaganda (Esarey, Stockmann, and Zhang 2016; Oates 2007; Blum 2022) and how such propaganda can be emotionally appealing (Mattingly and Yao 2021). By highlighting polarized perceptions of media and information in Russia, my study also contributes to the growing literature on politically biased information processing in autocracies (Robertson 2015; Chapman 2021; Huang and Yeh 2017; Wojcieszak et al. 2018; Laebens and Öztürk 2020).

More broadly, this study emphasizes that citizens in authoritarian regimes are not simply objects of manipulation and brainwashing. Propaganda can speak to citizens' identities, and it needs to account for existing beliefs and worldviews to be successful. Thus, my analysis contributes to our understanding of the limits of authoritarian control and manipulation (Rosenfeld 2018; Frye 2021), showing that autocrats are not omnipotent, highly rational manipulators that they are sometimes portrayed to be.

My research also complements recent work on the strategies and tactics of authoritarian propaganda (see e.g., Huang 2015; Alrababa'h and Blaydes 2021; Carter and Carter 2022), highlighting an important, previously overlooked role of propaganda and emphasizing that the space for persuasion in autocracies may be limited. That said, improving trust in state media through belief affirmation should also increase the effectiveness of persuasion techniques such as blame-shifting (Rozenas and Stukal 2019).

I also shed light on another puzzle: why non-democratic regimes often allow independent media, which may undermine the plausibility of propaganda (Gläßel and Paula 2020). Previous work has argued that such media can provide useful information (Egorov, Guriev,

and Sonin 2009; Lorentzen 2014) or make citizens more content (Kern and Hainmueller 2009; Huang and Yeh 2017). My analysis suggests that citizens in the propaganda bubble find other news sources unattractive, which reduces the danger of independent media to autocrats while keeping their benefits identified by earlier scholarship.

Finally, my results are relevant to the formal theoretical work on propaganda and Bayesian persuasion (Kamenica and Gentzkow 2011; Edmond 2013; Gehlbach and Sonin 2014). This research commonly assumes a uniform response to information manipulation among citizens and their ability to observe media bias, whereas my analysis suggests that it is worth explicitly modeling the heterogeneity of political preferences, identities, and news perceptions.

1 How Propaganda Works: Belief Affirmation and Trust in State Media

Authoritarian propaganda is commonly viewed as a strategic effort to manipulate citizens' attitudes and behavior (Gehlbach and Sonin 2014; Luo and Rozenas 2022), and many scholars naturally assume citizens to be suspicious of it (Mickiewicz 2008). Thus, theories of propaganda 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. Alternatively, autocrats may decide that persuading the skeptics is not possible and instead use propaganda to signal the regime's dominance (Huang 2015, 2018; Wedeen 1999), threaten the opposition (Carter and Carter 2022), manipulate citizens into overestimating regime support and belief in its narratives (Little 2017; Huang and Cruz 2022), distract the public (King, Pan, and Roberts 2017), or undermine alternative information sources (Pearce and Kendzior 2012; Pomerantsev 2015).

Yet, while plenty of studies ask what propaganda does for autocrats, scholars rarely ask what it does for citizens (Oates 2007). One reason for this omission is that authoritarian rule is by default seen as minority rule, forcibly imposed on the population. As Przeworski (2022) notes, autocracies are "assumed to be inherently brittle, surviving only because people are misled or repressed." However, new work on authoritarian regimes increasingly suggests that this framework is too limiting. This research documents how autocrats provide public services, respond to citizens' requests (J. Chen, Pan, and Xu 2016; Su and Meng 2016), and build meaningful emotional and identity connections with the public (Greene and Robertson 2019; Laebens and Öztürk 2020). State television stations controlled by autocrats are often popular and treated seriously by news consumers (H. Zhang, Zhou, and Shen 2013; Levada Center 2020), which also suggests that propaganda produces something that citizens value.

To gain a better understanding of the work that propaganda does, it is important to relax the assumption about autocracy as the rule of minority. For regimes that have genuine and substantial popular support (Matovski 2021), the most important challenge is not winning over the critics but preventing the erosion of existing support. State propaganda can be used for this purpose. Research shows that repeating identity-consistent messages reinforce the corresponding political beliefs and attitudes (Stroud 2010). Consequently, by centering political coverage on ideas and narratives congenial to the pro-regime majority, state media can keep the connection between the autocrat and the public alive. At the same time, such *affirmation propaganda* can also generate value for the public: it "helps" the majority to maintain its identity, giving citizens reasons to feel better about themselves and their country.

Consider, for example, Vladimir Putin's propaganda in Russia. For Putin, attracting additional followers has rarely been a priority: he enjoyed widespread popular support from the very beginning of his rule in 2000.[1] Instead, it was essential to maintain the

[1] https://www.levada.ru/en/ratings/. It is very unlikely that this pro-Kremlin majority was created by

interest and trust of this sympathetic public. To that end, the Kremlin's propaganda consistently focused on the themes that strongly resonated with the pro-Putin majority—Russia's disastrous post-communist transition (Belmonte and Rochlitz 2019) and the country's diminished global standing after the Soviet collapse, which were commonly blamed on the U.S. and NATO (Sokolov et al. 2018). Therefore, propaganda took an increasingly anti-Western stance and talked extensively about Soviet achievements and Russia's successes in World War II. The Kremlin's media highlighted citizens' grievances and acknowledged the trauma that many of them shared, simultaneously offering a hope of restoring Russia's greatness and dignity through Putin's continuing rule (Greene and Robertson 2019; Sharafutdinova 2020).

This discussion suggests the first testable expectation: **Regime supporters should be more likely to find propaganda messages targeting their identity credible, compared to opposition-minded citizens (critics) who should be more skeptical about such propaganda**. With respect to Kremlin's propaganda in Russia, this means statements that praise Russia or its government or contain anti-Western sentiment; I label such news content "pro-Russia messages."

At the same time, whenever media reporting strays from the core beliefs of regime supporters, they would find such messages less plausible. In particular, **supporters should be less likely to believe messages inconsistent with their pro-regime beliefs ("critical messages"), compared to opposition-minded citizens**. In the Russian case, critical messages may be negative statements about Russia or positive stories about the West and its allies.

Further, identity-consistent reporting is a common way for media organizations to gain credibility among target audiences (Gentzkow and Shapiro 2006), and state media can win citizens' trust in this way as well. As regime supporters observe positive messages

propaganda, as in the first years of Putin's rule, state control over media was relatively weak.

about their country or criticisms of its (alleged) enemies, they get a sense that propaganda outlets are on their side. Moreover, such coverage also indirectly signals that alternative (independent) news sources, which offer more balanced and critical reporting, are unreliable and untrustworthy.[2]

Therefore, **regime supporters should trust state media outlets more than independent media organizations**.[3] Further, **supporters should be less likely than critics to recognize that the coverage of state media outlets is censored and inaccurate**. As a result, pro-regime citizens would refrain from seeking alternative information sources and remain in the echo chamber of propaganda.

Public trust makes it easier for propaganda outlets to spread falsehoods for the benefit of the regime, but this trust is not a zero-sum game. There is a subjective and emotional value for media consumers in knowing that there are news outlets they can rely on, and this confidence in information sources can be a part of the service that propaganda offers to the public.

Moreover, trust in state media can be lost if these media stop focusing on the needs and expectations of the pro-regime majority. For example, an autocrat may consider making propaganda more appealing to the skeptical and critical public by decreasing the pro-regime bias (Carter and Carter 2023) and incorporating more critical messages—e.g., admitting problems or government's failures. However, in Appendix A, I show formally that if the opposition is fairly distant ideologically, it is not possible to appeal simultaneously both to supporters and critics: even if critical messages appear more accurate to critics, such reporting would look less accurate to supporters. In other words, we should expect that **when propaganda outlets include critical messages, their perceived trustworthiness is increased among critics but reduced among supporters**. More broadly,

[2] In most autocracies, citizens can still access independent media in one form or another. In Russia, for example, even when all major independent outlets were banned or blocked during the invasion of Ukraine, these media organizations remained accessible via VPNs and social media pages.

[3] I use the terms "state media," "state-controlled media," and "state propaganda outlets" interchangeably.

this means that certain more nuanced propaganda strategies may actually backfire among the pro-regime public.

This discussion helps us better understand the role of persuasion in authoritarian propaganda efforts. In general, when the pro-regime majority is substantial, the space for persuasion shrinks: the support base is not particularly skeptical about propaganda, and persuading the skeptics is much less important (the skeptical minority can be ignored or repressed if necessary). However, autocrats cannot always rely on affirmation propaganda because from time to time, they need to convey new narratives or justifications even to the sympathetic majority. In that case, they can exploit the previously won trust. Still, they have to strike a balance between manipulating the public into supporting something new and telling citizens what they want to hear.

For example, when the Kremlin's propaganda tried to justify its war on Ukraine, it benefited from the public's receptivity to state media, but it also framed the conflict in terms that Putin supporters could sympathize with. State media portrayed Ukraine as a puppet of the West in the latter's effort to destroy Russia, and they drew parallels between this conflict and World War II. Thus, new narratives about Ukraine as a military threat were integrated into the familiar anti-Western narratives and comforting stories about Russians fighting Nazis.

To sum up, viewing propaganda only as a manipulation instrument applied to induce certain behavior or attitudes oversimplifies information politics in autocracies. It is more productive to consider propaganda as part of a broader relationship between autocrats and the public: it allows governments to demonstrate their responsiveness and fulfill citizens' demand for political connection, a feeling of pride, a sense of belonging to a national community, etc. Even individuals who are depoliticized and unsophisticated (Zhelnina 2020; Alyukov 2022) may find such political and emotional value in propaganda. This is why so many in autocracies may genuinely prefer the content of state media to alternative,

more independent news sources. But this also means that shaping and changing public opinion under autocracy is not easy. Propaganda has to cater to existing identities and political expectations, and when it diverges too far from the majority's core beliefs, the public could stop listening.

2 Research Design

This analysis is based on three surveys conducted in Russia. In all three studies, the participants were shown a series of news stories, including pro-Russia messages and critical messages, displayed in random order. Respondents were asked to indicate whether each story was, in their view, true or false. First of all, these three surveys allow me to examine the perceptions of pro-regime content in different samples of Russians. Further, 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 credibility of state media outlets in comparison to independent media. Study 2, a survey fielded via the polling firm Levada Center in August 2019 ("the national survey"), extends the 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 additional evidence on the perceived trustworthiness and accuracy of state and independent media.

2.1 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,[4] has several advantages in examining the perceptions of propaganda.

By turning news evaluations into a game, I provided internal motivation to evaluate a

[4]See, e.g., the recurring BuzzFeed quiz on fake news: https://www.buzzfeed.com/tag/fake-news-quiz.

large number of diverse news messages, ensuring that the results are not overly dependent on individual stories. The quiz premise also improves accuracy motivation, prompting respondents to answer more honestly and reducing expressive responding to political stories.[5] 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.[6] The quiz was available online for about three weeks, and at each moment, 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 additional 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.[7] In 2020, around 80% of Russians regularly used the internet[8], and a large proportion were Facebook users.[9] I followed the suggestions from B. Zhang et al. (2020) in using Facebook's

[5] Increased 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.

[6] To determine veracity, I relied on fact-checking websites and did additional fact-checking using reputable news agencies.

[7] Moreover, 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).

[8] According to the media analytics company Mediascope: https://mediascope.net/news/1250827/.

[9] In June 2020, 36 million people in Russia accessed Facebook at least once: https://ppc.world/articles/a

ad targeting features to make sure that key demographic subgroups were well represented in the sample.

The quiz was completed by 16,935 respondents. About 12 percent 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.[10] 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 all three studies are in Table B1 in the appendix.

Establishing the preference for pro-regime content. The quiz included pro-Russia messages and critical messages. Pro-Russia messages 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.*" Critical messages contained negative statements about Russia and its government or positive statements about Western countries and Ukraine; 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.*"

In the analysis below, I examine Russians' preference for pro-regime or critical 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. These comparisons are estimated as covariate-adjusted contrasts based on the following linear regression:

uditoriya-shesti-krupneyshih-socsetey-v-rossii-v-2020-godu-izuchaem-insayty/.

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

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

where R is whether the respondent said the story is true, $DIRECTION$ is a set of dummies indicating whether stories are pro-Russia, critical, or neutral, $SUPPORT$ indicates 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. To examine whether supporters view state-run outlets as more trustworthy, I followed 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 an **independent media treatment**. 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.[11] Randomization worked as intended (see Table B3 in Appendix B).

[11]One 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* to be state-controlled, and the estimates are similar.

The texts of the news stories were identical in all treatment groups. 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 **independent 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.

2.2 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 pro-Russia and critical 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 and 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.

2.3 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 and whether they view 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 state 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 state-run television stations or any independent news outlets,[12] 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 independent media, $SUPPORT$ indicates 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 news outlets offer complete, uncensored news coverage, 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.

[12] The full list of state-controlled and independent media outlets is provided in Appendix B.

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.

2.4 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 (in some analyses below, I use a dichotomized measure of support). 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).[13] To mitigate reverse causation, the question about Putin's support was asked before 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 to have sufficient variation in presidential approval within each sample, but the diversity of these samples also helps establish that the relationships of interest hold in different groups of the Russian population.

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

[13] In 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.

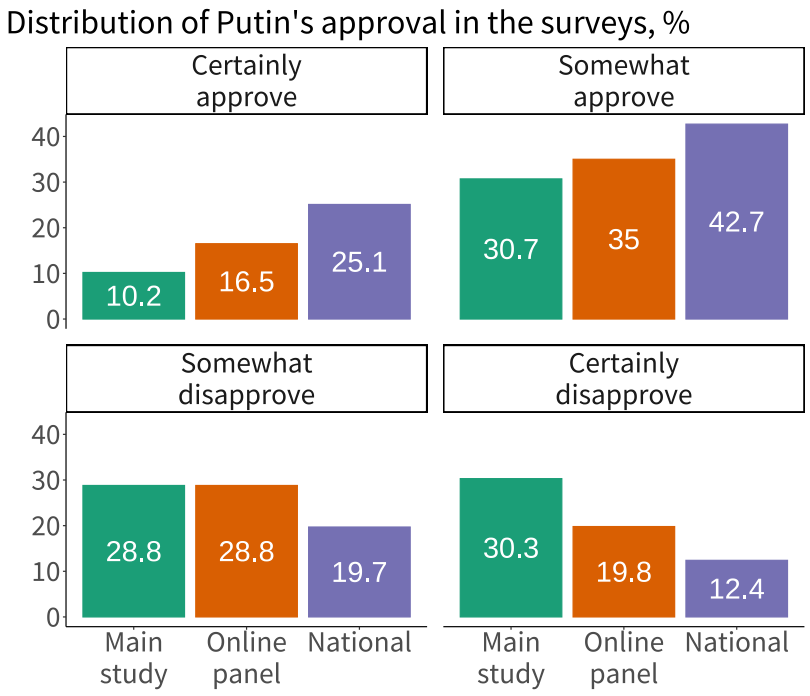

Figure 1: The distribution of presidential approval in the three survey samples: the social media sample, the online sample (OMI), the nationally representative sample (Levada)

3 Findings

3.1 Supporters Are Receptive to Identity-Consistent Stories

Figure 2 shows that Putin supporters on average were 11 percentage points more likely to find pro-Russia stories credible than were Putin critics (estimates in black show the average difference across all pro-Russia stories). This 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).

The estimates in gray in the figure show analogous differences with respect to particular subcategories of messages—stories positive or critical about Putin, Russia in general,

the West, or Ukraine. Supporters were most receptive to anti-Western messages, which is understandable given that Putin himself has extensively exploited the anti-Western sentiment widespread among the pro-regime majority (Sharafutdinova 2020).

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. This story appeals both to the anti-LGBTQ sentiment that many Putin supporters share and their perceptions of the United States as a threat to "traditional" social values.

At the same time, only 23 percent of supporters believed another fabricated story positing that Pope Francis had awarded Putin with a rare medal for his efforts to improve world peace. Unlike the California story, this pro-Russia message did not directly speak to beliefs deeply held by pro-Putin citizens, so most of them deemed the story implausible. In other words, Putin supporters do not automatically accept propaganda falsehoods, and it is difficult to impose on them narratives not grounded in their core beliefs, even if such narratives correspond to the overall pro-regime line.

Figure 2 also shows a strong bias against critical messages among Putin supporters: on average, they were 18 percentage points less likely to recognize such stories as true. 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 (both reports were true).

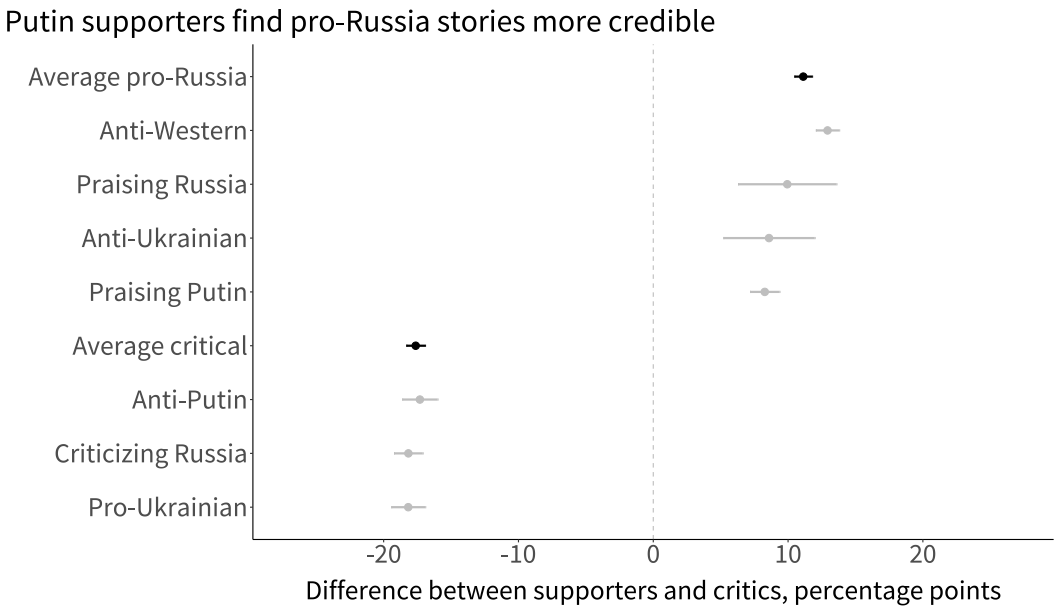

Figure 2: Difference in the shares of Putin supporters and critics who found pro-Russia and critical stories credible. Results from the main study. 95% confidence intervals are shown.

3.2 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.

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.[14] "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.

In line with my expectations, 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

[14]The 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.

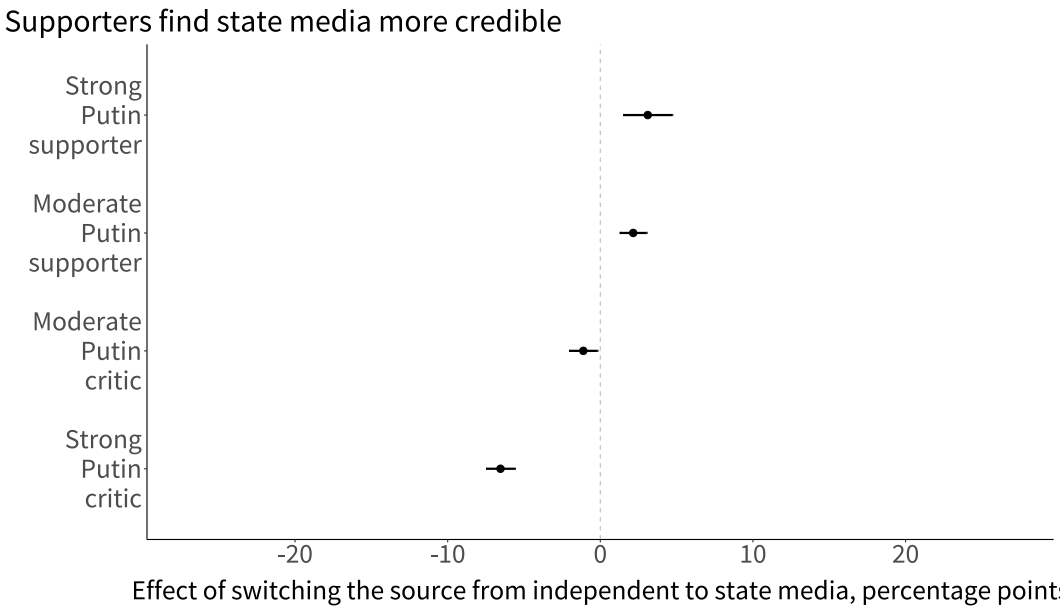

Figure 3: The effect of changing the treatment (source attribution) from an independent to state media outlet on evaluations of news stories, by approval of Vladimir Putin. Calculations based on a linear regression of news story evaluations on state control and presidential approval; results from the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

to when an independent news outlet was assigned.[15] 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 even somewhat more credible, given how often these outlets engage in censorship and disinformation. This finding highlights how trust in news sources can be driven by political affinity rather than by objective credibility and the quality of reporting.

These results are robust to different model specifications and to using alternative measures of pro-regime 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).

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

3.3 Critical Messages From State Media Backfire Among Supporters

My theory suggests that if state media outlets moderate their pro-regime bias by sending more critical messages, this can improve trust among opposition-minded citizens but undermine trust among supporters. I test this possibility by examining the effect of switching news sources with respect to critical news stories.

Figure 4 supports the theory. For Putin critics, the effect of state media was closer to zero when critical stories were considered—that is, opposition-minded respondents were less skeptical about propaganda outlets when these outlets "sent" more critical messages. However, among strong Putin supporters, the effect of state media was essentially zero with respect to critical news stories. Remarkably, when propaganda outlets provide more accurate information, they lose their credibility advantage among supporters. While the evidence here is not definitive (the confidence intervals overlap), it highlights an important trade-off implied by the theory. This result also reiterates the preceding argument that trust in state media among supporters is driven by the emphasis of these media on pro-Russia messages reflecting supporters' core beliefs.

3.4 Additional Evidence: Supporters Find 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. (In addition, Figure D1 in the appendix shows that pro-Putin respondents predominantly relied on state propaganda outlets, and they were

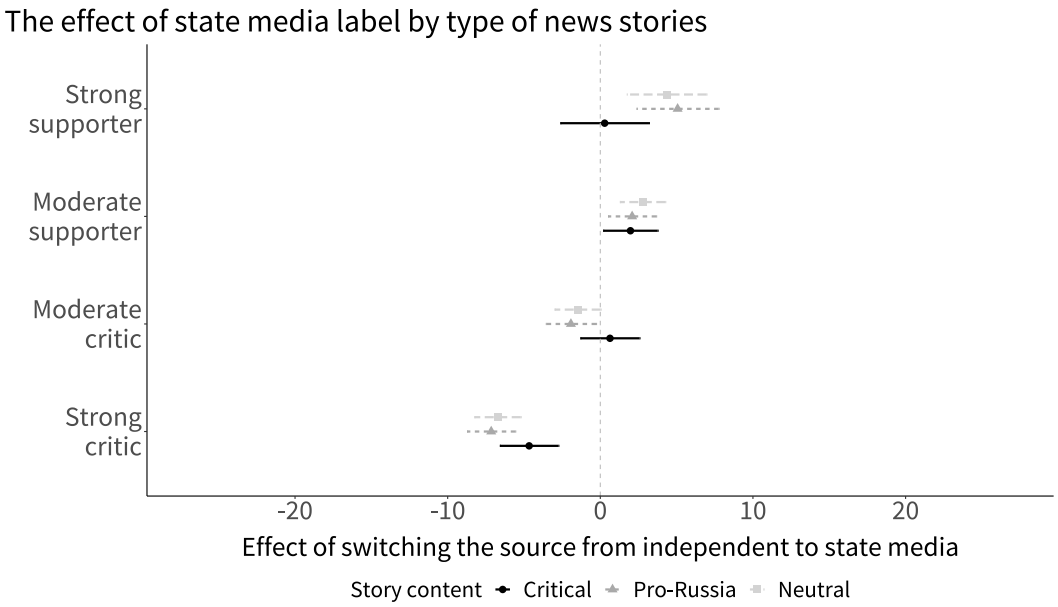

Figure 4: The effect of changing the treatment from an independent to state media outlet on evaluations of news stories, by approval of Vladimir Putin and by the political content of news stories. Calculations based on a linear regression of news story evaluations on state control and presidential approval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

highly unlikely to use any independent media.)

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 expectations, 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 the authorities. And yet, 89 percent of those who recognized this lack of independence

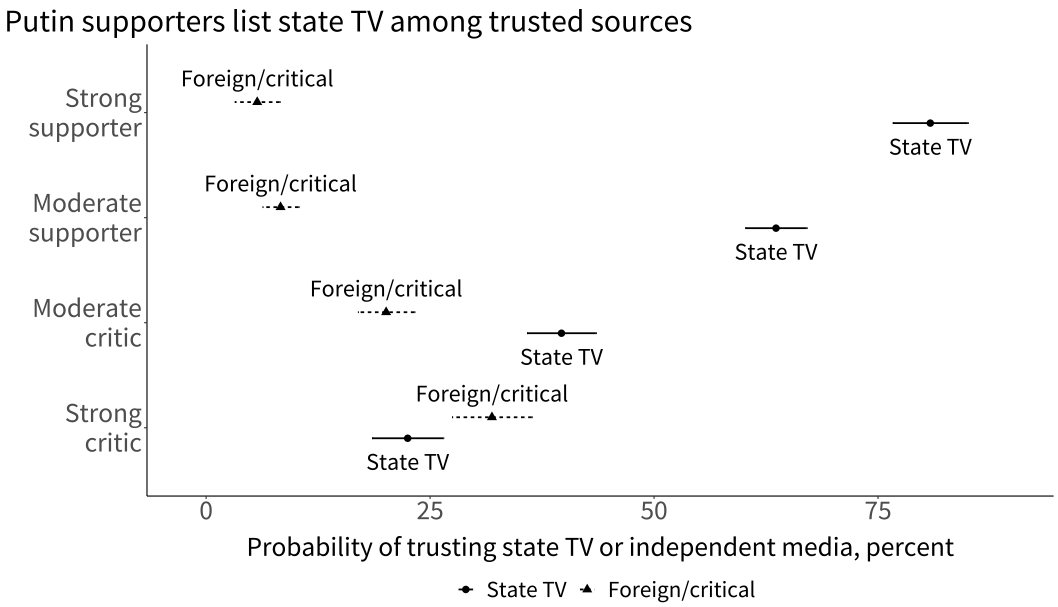

Figure 5: The probability of trusting independent media or state television, by approval of Vladimir Putin. Calculation based on a linear regression of media use (dummy variables) on presidential approval and demographic covariates; results from the OMI online panel (Study 3). 95% confidence intervals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

claimed that *Channel One*'s coverage was mostly accurate, and 53 percent of them listed this station among trusted news outlets. This underscores how little citizens may value media independence and balanced reporting when authoritarian media are biased in their preferred direction.

Crucially, positive perceptions of propaganda outlets among pro-regime citizens were 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. This analysis makes it clear that for many pro-Putin respondents, being in the propaganda bubble was a choice, not an inevitability.

Regime supporters did not view independent media as a better alternative even if

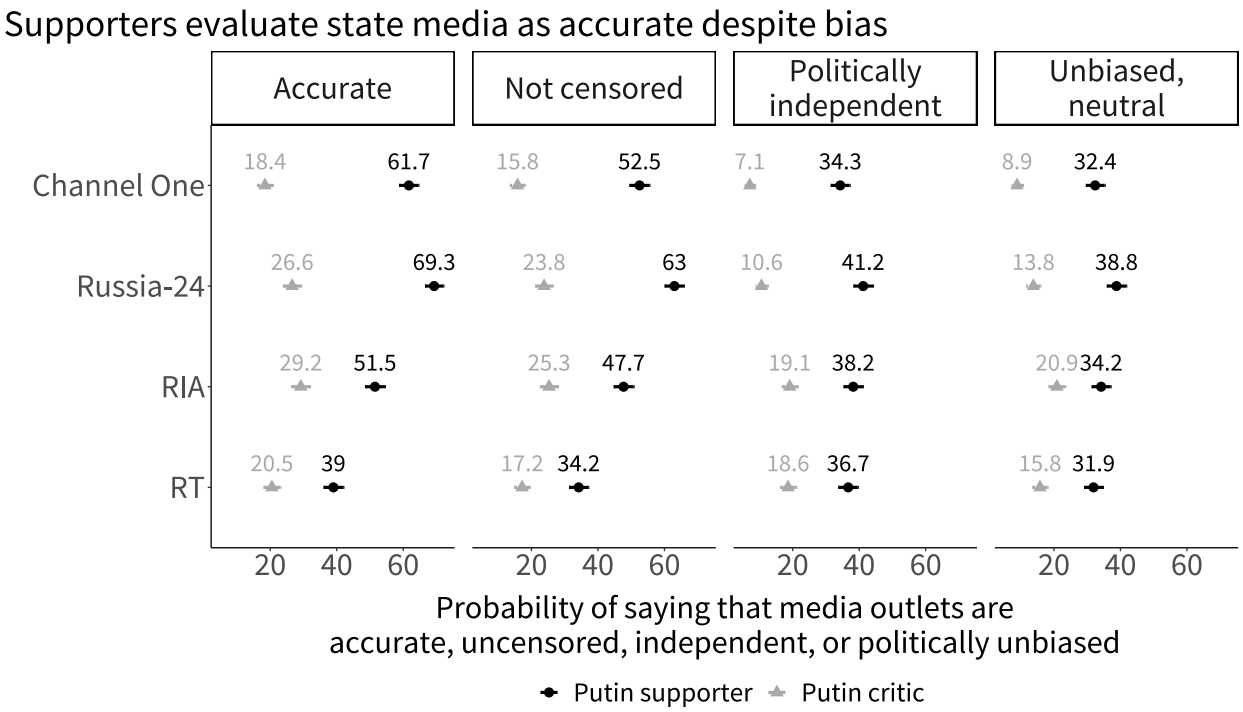

Figure 6: The probability of agreeing with the statements that state media (Channel One, Russia-24, RIA, RT) are accurate, not censored, politically independent, and politically unbiased, by approval of Vladimir Putin. Calculations based on multinomial regressions of news source evaluations on presidential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

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, and among supporters who admitted that *Channel One* often publishes false information, this proportion was 6.6 percent—essentially, the same.

Finally, as in the source credibility experiment, Putin supporters evaluated state media clearly 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 that state media would not gain much by moderating their coverage. It would probably be not enough to win back the skeptics who are very strongly predisposed against state outlets, whereas pro-regime citizens, as demonstrated in the experiment, may be alienated by critical messages.

Conclusion

This study has used a unique experimental approach and survey data from Russia to demonstrate that citizens of autocracies often exhibit a genuine preference for state media and propagandistic content. This preference is likely driven by a sense of political affinity; targeting regime supporters with identity-consistent messages allows state media to generate trust among this public. In contrast, pro-regime citizens view alternative news sources as unreliable and steer clear of their critical reporting.

Therefore, this study supports an emerging argument in the research on the political economy of media that the availability of independent and politically neutral outlets may not reduce neither media bias nor trust in unreliable sources (Gentzkow, Wong, and Zhang 2021). Thus, extending access to independent news media may not deter citizens from

consuming propaganda.[16] 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.

My analysis suggests that leaders such as Vladimir Putin do not have to be masters of persuasion. Instead, they can find narratives and emotions that resonate with citizens and maintain credibility by crafting propaganda messages around these narratives. When a large majority is attuned to such affirmation propaganda, there are few incentives for autocrats to provide more accurate information or to persuade skeptics via highly sophisticated strategies, as that can invoke a backlash among core supporters.[17] There is, of course, space for persuasion in authoritarian contexts, but its role is probably more marginal, consistent with research conducted in other political contexts.

Moreover, propaganda cannot simply be imposed on citizens from above. When propaganda does not directly engage with citizens' identities or values, it is difficult to make even the pro-regime public to accept such messages. The Russian government, for example, has often struggled with promoting genuinely unpopular measures, such as anti-COVID restrictions (Kovalev 2021), or manipulating the perceptions of economic problems (Rosenfeld 2018). And on the contrary, when propaganda "works"—meaning that it is accepted by the public—it often happens because citizens extract some emotional or political value from consuming such narratives.

The lessons from this analysis are most relevant to electoral autocracies and "illiberal democracies" that rely on public support and information manipulation, avoiding large-scale repression. Thus, future studies may examine the different roles that propaganda plays in other such regimes—for example, to what extent and how effectively leaders such

[16] Similarly, Y. Chen and Yang (2019) demonstrate that many Chinese would not engage with independent foreign media even when given easy access to such media.

[17] At the same time, belief-affirming messages targeted at supporters may backfire among critics, eliciting even more polarized responses from the latter, as Peisakhin and Rozenas (2018) document in a study of Russian state television in Ukraine.

as Recep Tayyip Erdoğan in Turkey or Viktor Orbán in Hungary apply belief-affirming tactics. It is also important to understand how such autocrats adjust their propaganda strategies when they start losing popular support, and how the role of propaganda changes when an informational autocrat turns to harsher and more repressive tactics, as Vladimir Putin did during Russia's war against Ukraine. While this study has provided an insight into why Russians were initially receptive to the Kremlin's pro-war propaganda, it remains to be seen how long such trust may hold in wartime conditions, especially when the regime expects sacrifices from the public.

Finally, why and how are individuals able to resist authoritarian propaganda? As my analysis shows, some Putin supporters perceive propaganda skeptically despite its emphasis on belief-affirming messages. Understanding when 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.[18] 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

[18] I 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

	Main study		National survey		Online panel	
Variable	%	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 pro-Russia, critical, 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 Independent Media Outlets

Various analyses in this study rely on a categorization of news outlets as state-controlled or independent. 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).

Independent (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 independent 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

					Mean evaluations		
Code	Text	False?	Political	Direction	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	Pro-Russia	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	Critical	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	Pro-Russia	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	Pro-Russia	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	Pro-Russia	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	Pro-Russia	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	Critical	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	Critical	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	Critical	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	Pro-Russia	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	Pro-Russia	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	Critical	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	Critical	0.758	0.776	0.715
21	Documents confirming Trump’s links to Russia were obtained from the Deutsche Bank	FALSE	Yes	Critical	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	Pro-Russia	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	Critical	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	Pro-Russia	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	Pro-Russia	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	Critical	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	Pro-Russia	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	Pro-Russia	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	Pro-Russia	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	Pro-Russia	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	Critical	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	Critical	0.635	0.659	0.597
50	Protesters in New York poisoned policemen with milkshakes with added bleach	FALSE	Yes	Pro-Russia	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

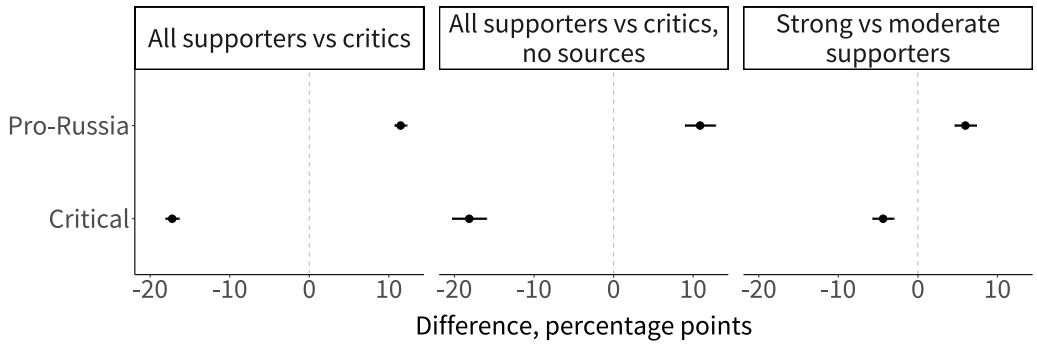

Figure B2: Covariate-adjusted differences in the shares of respondents who found stories credible. Calculated from linear regressions of story evaluations on Putin approval and covariates. Results from the main study. 95% confidence intervals are shown.

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.

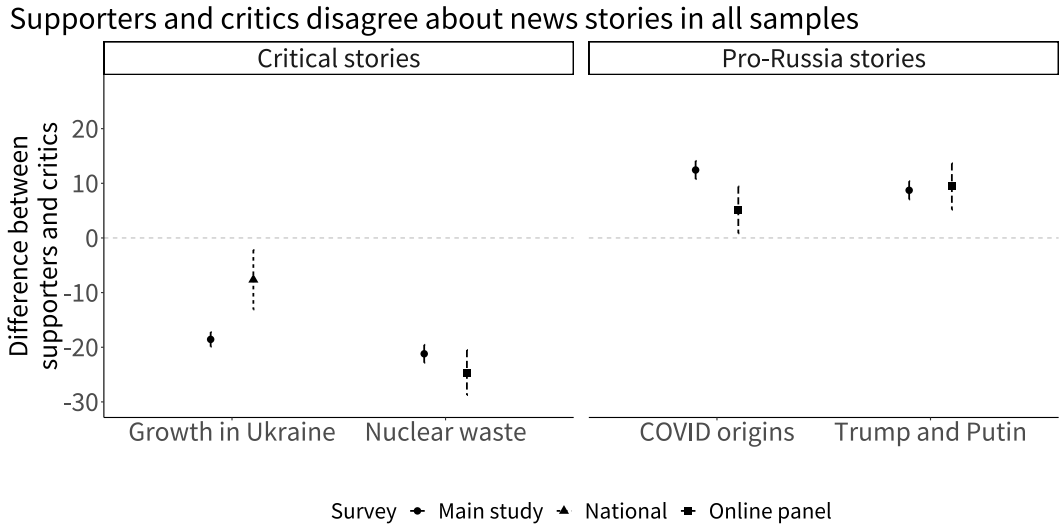

Figure B3: Covariate-adjusted differences in the shares of Putin supporters and critics who found stories credible. Results from Studies 1, 2, and 3. 95% confidence intervals are shown

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.

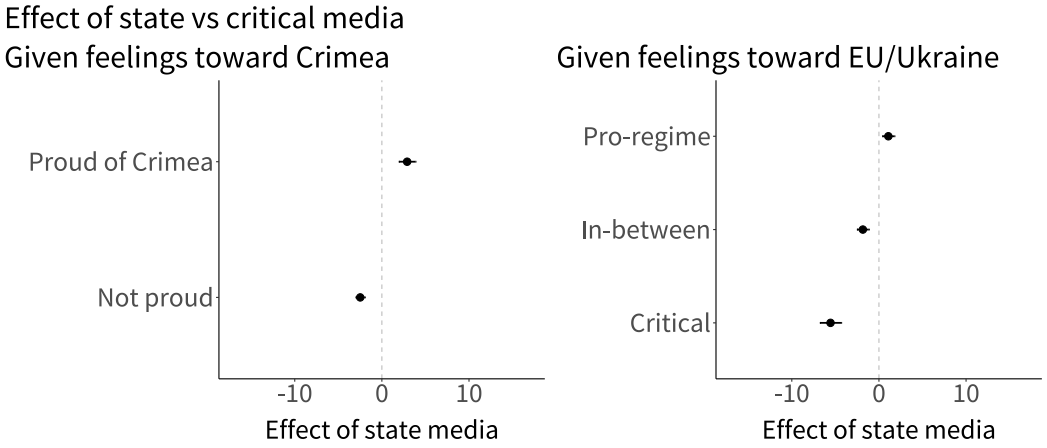

Figure B4: The effect of changing the treatment from critical to state media outlet on evaluations of news stories. Calculations based on a linear regression of news story evaluations, accounting for state control and government support; results from the main study. 95% confidence intervals are shown

Experimental Results by Individual News Sources

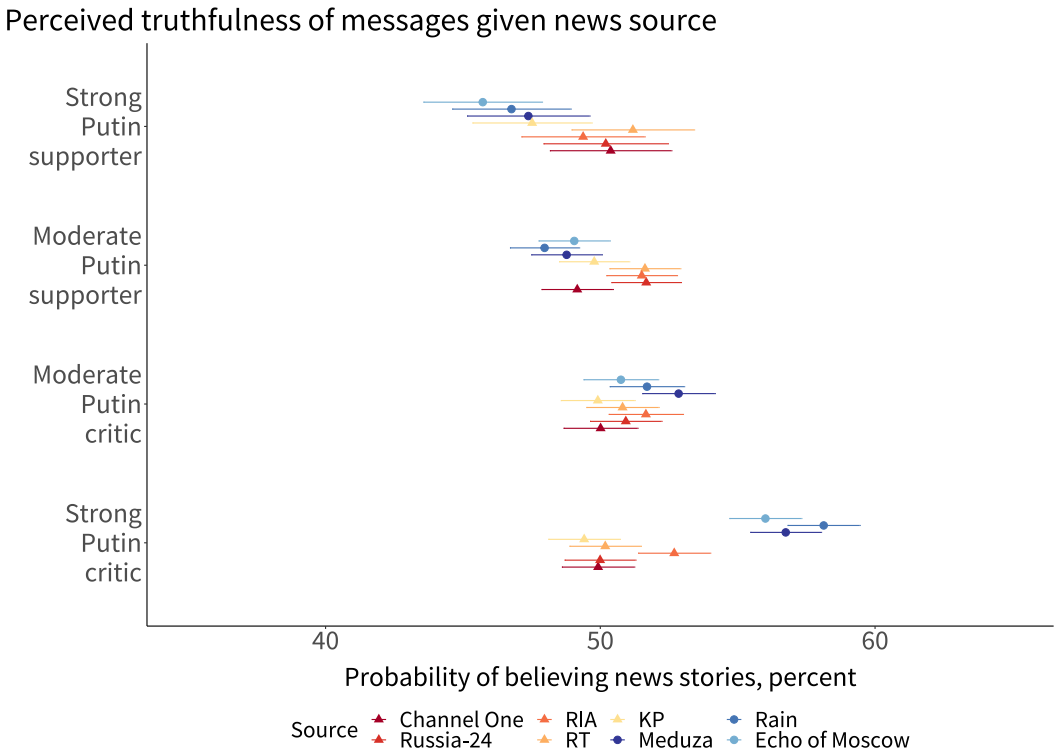

Figure B5: Probability of evaluating news stories as true when they are attributed to specific state-run and independent media outlets, by approval of Vladimir Putin. Calculations based on a linear regression of news story evaluations on media outlet dummies and presidential approval (see text for details);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

Experimental Results for Pre-Selected and "Current" News Stories

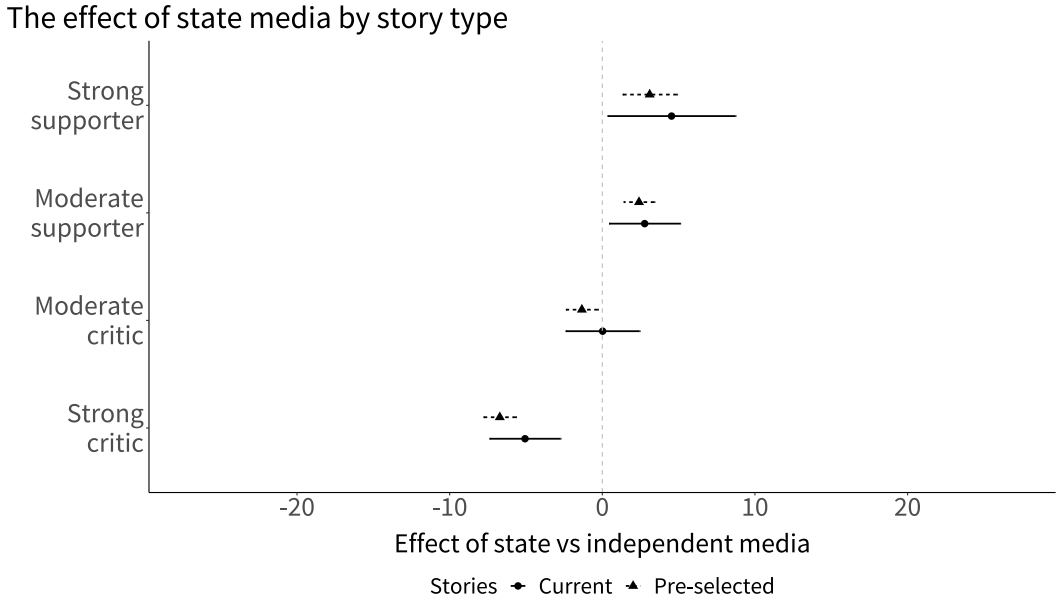

Figure B6: The effect of changing the treatment from an independent to state media outlet on evaluations of news stories, by approval of Vladimir Putin and by story type. Calculations based on a linear regression of news story evaluations, accounting for state control and presidential approval; results 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.

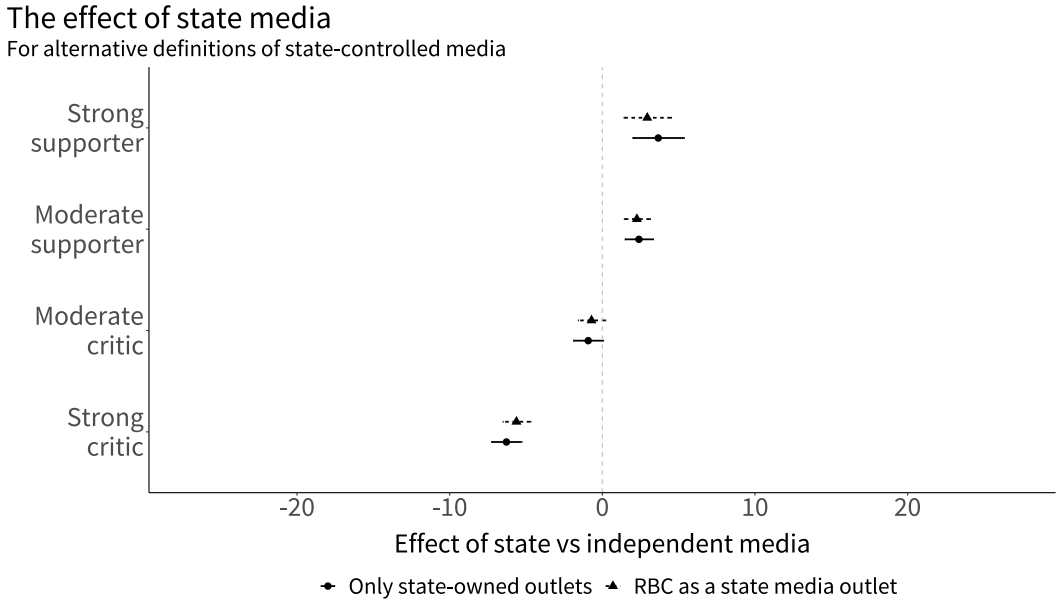

Figure B7: Effect of changing the treatment from an independent to state media outlet on evaluations of news stories, by approval of Vladimir Putin. Here, RBC is considered as a state-controlled outlet. Calculations based on a linear regression of news story evaluations, accounting for state control 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^{***}	0.413^{***}	-0.542^{***}
	(0.014)	(0.016)	(0.056)
Source: Critical	0.045^{***}	0.047^{***}	0.200^{***}
	(0.007)	(0.008)	(0.028)
Source: State-controlled	-0.020^{**}	-0.016^{*}	-0.092^{***}
	(0.007)	(0.007)	(0.026)
Source: RBC	0.034^{***}	0.034^{***}	0.151^{***}
	(0.009)	(0.009)	(0.036)
Somewhat disapprove	-0.021^{*}	-0.012	-0.094^{**}
	(0.008)	(0.009)	(0.032)
Somewhat approve	-0.033^{***}	-0.025^{**}	-0.149^{***}
	(0.008)	(0.009)	(0.032)
Certainly approve	-0.049^{***}	-0.042^{***}	-0.221^{***}
	(0.012)	(0.013)	(0.046)
Story order	0.006^{***}	0.006^{***}	0.025^{***}
	(0.000)	(0.000)	(0.001)
Source: Critical*Somewhat disapprove	-0.031^{**}	-0.036^{***}	-0.138^{***}
	(0.010)	(0.011)	(0.039)
Source: State-controlled*Somewhat disapprove	0.023^{*}	0.016	0.104^{**}
	(0.010)	(0.010)	(0.036)
Source: RBC*Somewhat disapprove	-0.006	-0.010	-0.027
	(0.013)	(0.013)	(0.051)
Source: Critical*Somewhat approve	-0.051^{***}	-0.054^{***}	-0.226^{***}
	(0.010)	(0.011)	(0.039)
Source: State-controlled*Somewhat approve	0.036^{***}	0.032^{**}	0.164^{***}
	(0.010)	(0.010)	(0.036)
Source: RBC*Somewhat approve	-0.011	-0.009	-0.048
	(0.012)	(0.013)	(0.050)
Source: Critical*Certainly approve	-0.055^{***}	-0.052^{***}	-0.245^{***}
	(0.014)	(0.015)	(0.056)
Source: State-controlled*Certainly approve	0.042^{**}	0.045^{**}	0.189^{***}
	(0.014)	(0.014)	(0.052)
Source: RBC*Certainly approve	-0.022	-0.017	-0.096
	(0.018)	(0.018)	(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^{***}	0.374^{***}
	(0.014)	(0.014)
Source: Critical	0.045^{***}	0.045^{***}
	(0.007)	(0.007)
Source: State-controlled	-0.011	
	(0.007)	
Somewhat disapprove	-0.021^{*}	-0.021^{*}
	(0.008)	(0.008)
Somewhat approve	-0.033^{***}	-0.033^{***}
	(0.008)	(0.008)
Certainly approve	-0.049^{***}	-0.049^{***}
	(0.012)	(0.012)
Story order	0.006^{***}	0.006^{***}
	(0.000)	(0.000)
Source: Critical*Somewhat disapprove	-0.031^{**}	-0.031^{**}
	(0.010)	(0.010)
Source: State-controlled*Somewhat disapprove	0.018	
	(0.009)	
Source: Critical*Somewhat approve	-0.051^{***}	-0.051^{***}
	(0.010)	(0.010)
Source: State-controlled*Somewhat approve	0.028^{**}	
	(0.009)	
Source: Critical*Certainly approve	-0.055^{***}	-0.055^{***}
	(0.014)	(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^{***}	0.384^{***}
	(0.007)	(0.009)
Source: Critical	0.021^{***}	0.045^{***}
	(0.004)	(0.009)
Source: State-controlled	-0.004	-0.011
	(0.004)	(0.008)
Source: RBC	0.025^{***}	0.038^{***}
	(0.005)	(0.011)
Proud of Crimea	-0.026^{***}	
	(0.007)	
Story order	0.006^{***}	0.006^{***}
	(0.000)	(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.

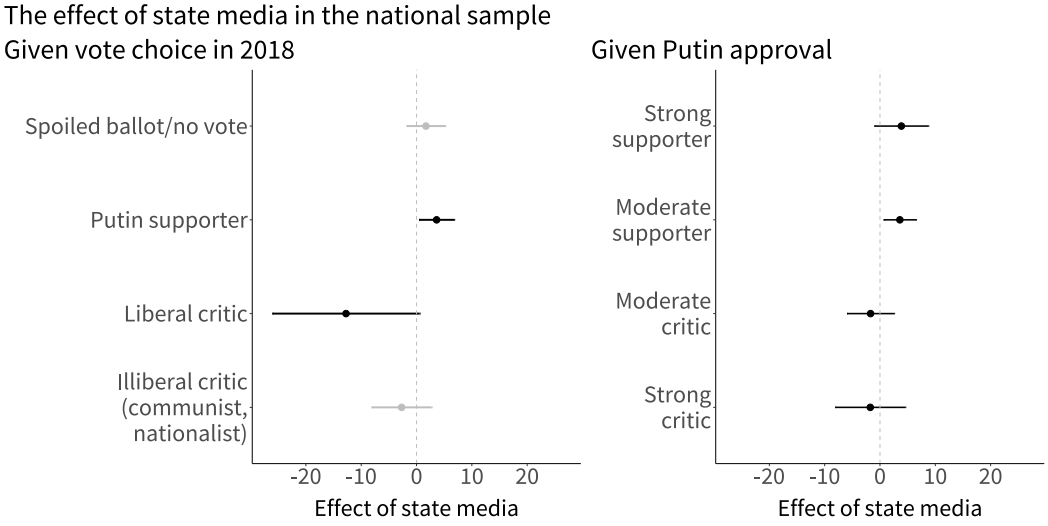

Figure C1: The effect of changing the treatment from the independent (Echo of Moscow) to state-run (Channel One) media outlet on evaluations of news stories, by respondent's vote in the 2018 presidential election or by approval of Vladimir Putin. Calculations based on a linear regression of news story 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^{***}	0.755^{***}
	(0.035)	(0.036)
Channel One	-0.018	-0.027
	(0.032)	(0.028)
Female	0.045^{***}	0.046^{***}
	(0.012)	(0.012)
Age	0.000	0.000
	(0.000)	(0.000)
Education	-0.008^{*}	-0.008
	(0.004)	(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^{***}	0.070^{***}	0.700^{***}	0.506^{***}	0.214^{***}	0.249^{***}	0.339^{***}	0.468^{***}
	(0.021)	(0.018)	(0.021)	(0.032)	(0.033)	(0.033)	(0.055)	(0.061)
Somewhat disapprove	0.202^{***}	0.204^{***}	-0.213^{***}	0.149^{***}	0.182^{***}	-0.090^{***}	0.146^{***}	-0.127^{**}
	(0.020)	(0.017)	(0.019)	(0.028)	(0.031)	(0.029)	(0.044)	(0.045)
Somewhat approve	0.323^{***}	0.374^{***}	-0.327^{***}	0.223^{***}	0.340^{***}	-0.168^{***}	0.269^{***}	-0.085^{*}
	(0.019)	(0.018)	(0.019)	(0.026)	(0.029)	(0.027)	(0.038)	(0.041)
Certainly approve	0.392^{***}	0.508^{***}	-0.408^{***}	0.262^{***}	0.392^{***}	-0.177^{***}	0.255^{***}	-0.140^{***}
	(0.025)	(0.025)	(0.024)	(0.027)	(0.032)	(0.030)	(0.040)	(0.043)
Age	0.002	0.016^{***}	-0.008^{***}	0.046^{***}	0.058^{***}	0.013	0.006^{***}	-0.002^{**}
	(0.003)	(0.003)	(0.003)	(0.006)	(0.007)	(0.007)	(0.001)	(0.001)
Female	0.009	0.042^{***}	-0.124^{***}	0.027	0.074^{***}	-0.038^{*}	0.027	-0.054^{*}
	(0.015)	(0.014)	(0.015)	(0.016)	(0.020)	(0.018)	(0.020)	(0.025)
Education	0.035^{***}	-0.002	0.125^{***}	-0.015	-0.021	0.107^{***}	-0.004	0.017^{*}
	(0.011)	(0.011)	(0.011)	(0.017)	(0.020)	(0.017)	(0.007)	(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^{***}	0.173^{***}	0.292^{***}
	(0.033)	(0.032)	(0.030)
Somewhat disapprove	0.184^{***}	0.172^{***}	-0.118^{***}
	(0.030)	(0.028)	(0.028)
Somewhat approve	0.353^{***}	0.411^{***}	-0.236^{***}
	(0.027)	(0.027)	(0.025)
Certainly approve	0.427^{***}	0.583^{***}	-0.262^{***}
	(0.027)	(0.030)	(0.026)
Female	0.048^{**}	0.114^{***}	-0.036^{*}
	(0.017)	(0.020)	(0.015)
Age	0.015^{*}	0.013	0.001
	(0.006)	(0.008)	(0.006)
Higher education	-0.065^{***}	-0.078^{***}	0.073^{***}
	(0.017)	(0.020)	(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.[19] Also see Table D1.

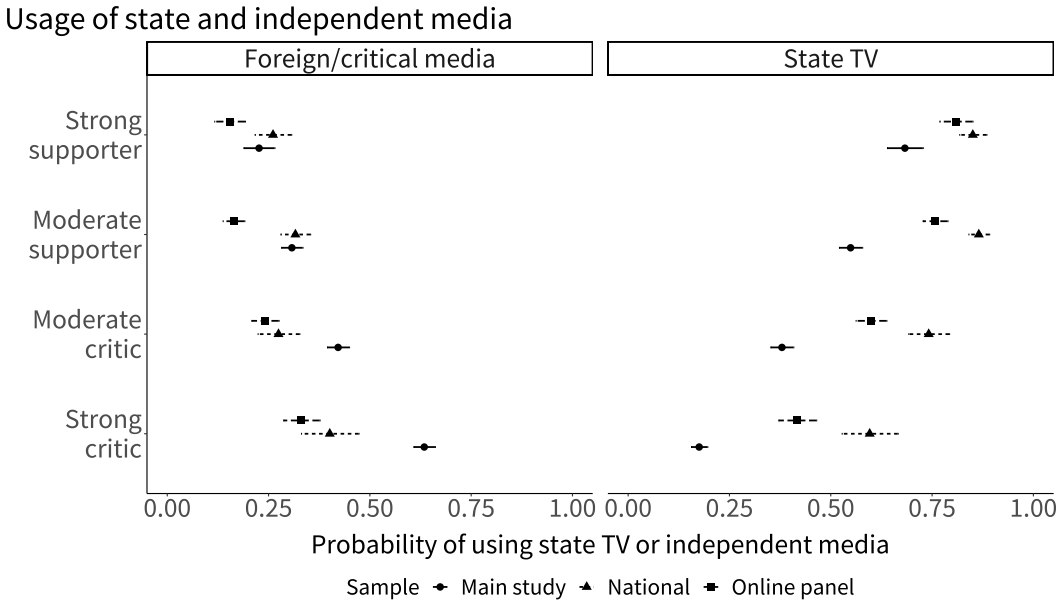

Figure D1: The probability of using independent media and state television, by approval of Vladimir Putin. Calculation based on linear regressions of media usage (dummy variables) on presidential approval and demographic covariates; results from the main study, from the nationally representative sample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

[19] In 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 Independent 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 independent media. Strong supporters trust state television a great deal regardless of their awareness of independent outlets. Moderate supporters who are aware of independent 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 independent media.

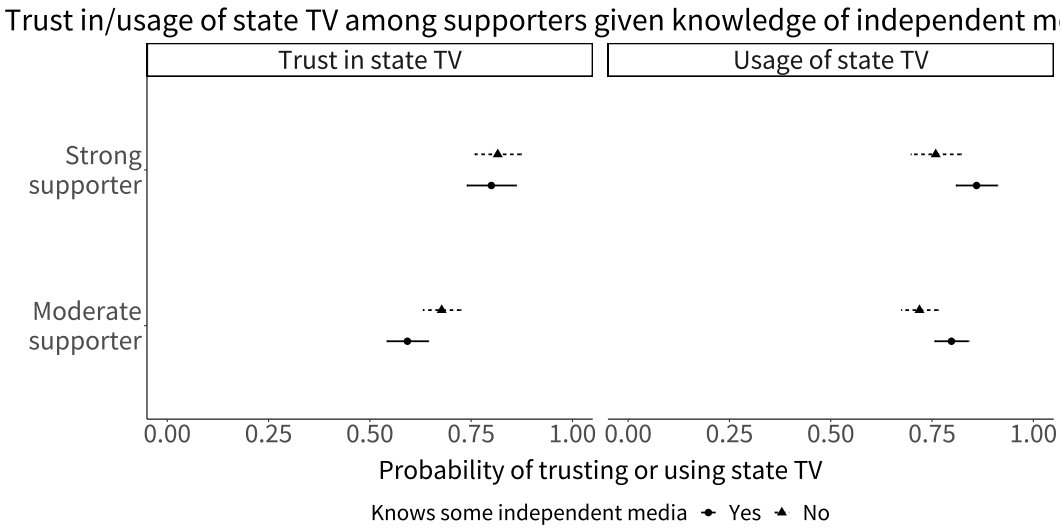

Figure D2: Probability of trusting or using state media depending on knowledge of independent media. Calculation based on a linear regression of media trust or media usage (dummy variables) on presidential approval, knowledge of independent media, and demographic covariates; results from the OMI online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

Knowledge of independent 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 independent media and control for the knowledge of the state media outlet in question.

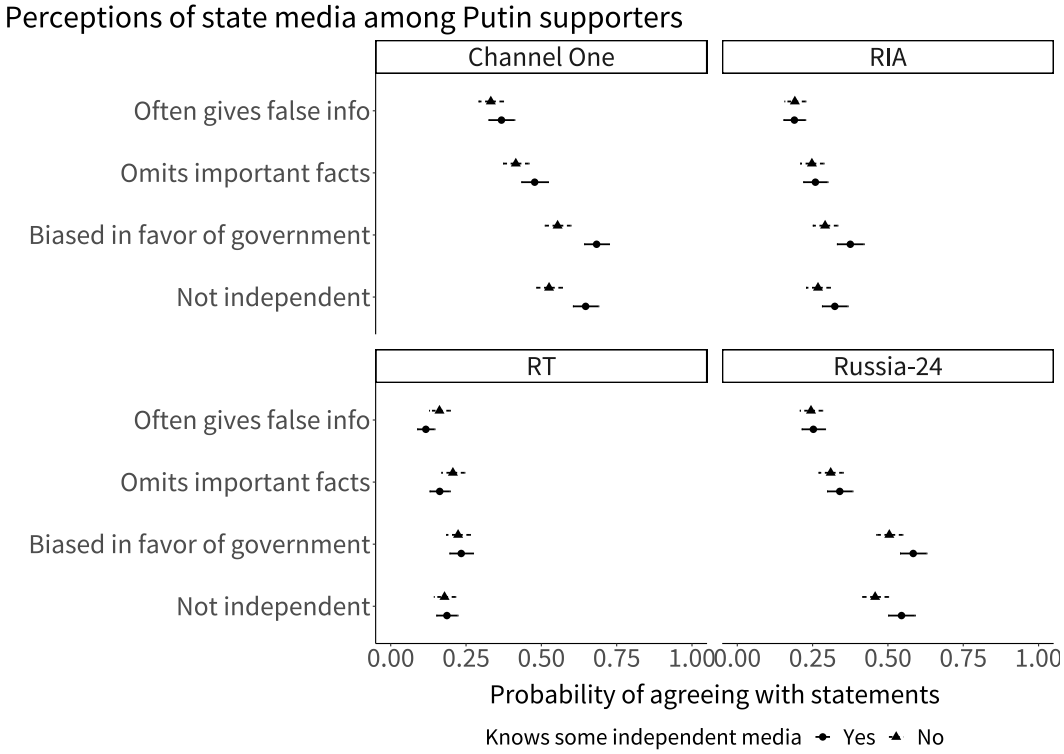

Figure D3: Probability that Putin supporters evaluate state media negatively along various dimensions. Calculations based on multinomial regressions of news source evaluations on knowledge of independent media and covariates (see text for details); results from the OMI online panel (Study 3). 95% confidence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