The Russian World, Export of Propaganda and Internet Media

Andrey Tkachenko
Nazarbayev University*

David Karpa
University of Bremen†

Michael Rochlitz
University of Bremen‡

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Abstract

Does language affinity facilitate the export of propaganda by authoritarian regimes in times of war? And through which channels can propaganda be exported effectively? We study these questions with the help of three survey waves conducted in Kazakhstan, Kyrgyzstan, and Uzbekistan on May 2021, October 2021, and June 2022. We find that in June 2022, Russian-speaking respondents were more likely to justify Russia's war in Ukraine, to negate Russian responsibility and to blame Western countries for the war, even after controlling for ethnicity. However, opinions about Russia between Russian-speaking and non-Russian-speaking respondents only started to diverge since the beginning of the war, and not before. The effects are especially prominent for Kazakhstan, where we find a 14.5% increase in positive views of Russia after February 2022, as well as an 11% increase for the part of the population that is Russian-speaking, but ethnically non-Russian. We argue that the main channels through which these shifts of opinion have taken place are consumption of news from the internet and Russian social media, while the importance of Russian TV as a channel for pro-Russian propaganda was relatively minor, and has further declined since February 2022.

* andrey.tkachenko@nu.edu.kz
† karpa@uni-bremen.de
‡ rochlitz@uni-bremen.de

"Russkiy mir" – the Russian world, a previously obscure historical term for a Slavic civilisation based on shared ethnicity, religion and heritage. The Putin regime has revived, promulgated and debased this idea into an obscurantist anti-Western mixture of Orthodox dogma, nationalism, conspiracy theory and security-state Stalinism

(The Economist)

1   Introduction

After Putin launched a full-scale invasion of Ukraine in February 2022, large parts of the international community condemned his actions as a serious violation of international law. Among international leaders criticizing Russia were the heads of state of a number of Central Asian countries that have always maintained close relations with Russia and count many Russian-speaking citizens among their populations.[1] Kazakhstan and other Central Asian countries, however, also voted against or abstained from voting for the UN resolutions that demanded the complete withdrawal of Russian forces from Ukraine in March, April, and October 2022. This ambiguity illustrates the tension that Central Asian are exposed to in the current conflict. They share a common history and tight economic relations with Russia, but also live in fear of Russia's military might and potential Russian claims on their territory.

This tension is not only apparent in the international relations between Russia and former Soviet republics in Central Asia, but also within the populations of these former republics, especially in countries such as Kazakhstan and Kyrgyzstan where the first language of a large percentage of the population is Russian. These Russian-speaking populations are torn between loyalty to their home countries, and a close cultural affinity to what has Russian state media has recently increasingly called the "Russkiy mir", or "Russian world". Through their language, they are also exposed to Russian propaganda, much more so than their fellow citizens whose first language is not Russian.

How did the start of Russia's full-scale invasion affect public opinion among Central Asia's Russian-speaking populations? What is the role of Russian propaganda in influencing public opinion in its near abroad? And what can we learn – more broadly – from this context about

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[1] for example, the President of Kazakhstan: https://astanatimes.com/2022/06/president-Tokayev-answers-tough-questions-at-economic-forum-in-russia/

the effects of cultural affinity on the ability of authoritarian regimes to export propaganda?

To answer these questions, we collected data from three waves of a survey conducted by the Central Asian Barometer in Kazakhstan, Kyrgyzstan, and Uzbekistan in May 2021, October 2021 and June 2022. The three separate survey waves permit us to examine how the use of Russian as a primary language is affecting opinions about Russia and the war, and how and if these opinions changed after February 2022. We also investigate if the Russian-speaking populations of Central Asia are using different news sources than their fellow citizens whose primary language is not Russian, and if the frequency by which these news sources are used changed over time.

We find that 4 months after the start of Russia's full-scale invasion of Ukraine, Russian-speaking respondents in Central Asia were about 8.3% more likely to justify Russia's war in Ukraine than non-Russian-speaking respondents (for Kazakhstan, this number was as high as 18%). They were also 4.7% less likely to attribute responsibility for the war to Russia, and 6.6% more likely to attribute responsibility to the US, the EU and NATO (8.8% and 12% for Kazakhstan).

Questions about the war were only asked in the June 2022 version of the survey. We can however gauge the evolution of opinions about Russia by using a question about general attitudes towards Russia, the US and the Eurasian Economic Union, which was asked in all survey waves. Here we see that opinions towards Russia only diverged after February 2022, but not before. Before the invasion, Russian-speaking respondents in Kazakhstan even had a significantly more positive view of the United States than non-Russian-speaking respondents.

We then investigate potential channels that could have affected public opinion. We find that consumption of news from the internet and Russian social media is consistently higher among the Russian-speaking population in our sample, while consumption of Russian TV news has declined among this group since the start of the war, and the use of Telegram has increased. There is no measurable difference with respect to the importance of remittances for both Russian and non-Russian-speaking respondents. We finally conclude that the internet news, Russian social media and Telegram have played an important role in shaping the opinions of Russian-speaking respondents since the escalation of the war in Ukraine in February 2022.

Our paper builds on a vast literature that has investigated the effects of the media and political propaganda on political attitudes and voting. The effect of traditional media such as TV and newspapers has been extensively documented, both for democracies (DellaVigna and Kaplan 2007; Gerber et al. 2009; Durante and Knight 2012) and autocracies (Yanagizawa-Drott 2014; Adena et al. 2015; Peisakhin and Rozenas 2018; Mattingly and Yao 2022; Pan et al. 2022). It is also notable that on traditional platforms such as TV news, media that are independent from the government are able to oppose the government effectively and influence voting behavior, even in authoritarian states (Enikolopov et al. 2011, 2022).

More recently, social media has started to play an important role in influencing public opinions (Bond et al. 2012). Less accessible to government control, social media also lack the reputation mechanisms that ensure minimum content quality and are thus prone to the spread of misinformation and polarization (Zhuravskaya et al. 2020). While social media has been used by the opposition to organize protests (Enikolopov et al. 2020) or mobilize voters (Enikolopov et al. 2022), and has been hailed as a "liberation technology" (Morozov 2011), authoritarian states are also increasingly spreading their messages through social media. Authoritarian governments employ different methods ranging from "flooding" popular platforms and hashtags with positive or distracting misinformation to shaping public opinion by providing different – and sometimes objectively wrong – narratives (Roberts 2018).

Beyond influencing the domestic population, research has shown that authoritarian propaganda is also increasingly spreading beyond borders, as a tool of foreign influence. China, for example, has been extensively criticized for spreading misinformation related to Covid-19 and other topics.[2] Scholars have argued that for Russia in particular, influencing popular opinion and elections abroad has become an important political objective (Snyder 2018). Indeed, there is empirical evidence for Russia being the most active autocracy in this respect (Martin et al. 2019), with the Brexit referendum and the 2016 presidential elections in the US as two prominent examples (Martin et al. 2019; Eady et al. 2023).

As part of this strategy, Russian diasporas and Russian-speaking communities abroad have become an important tool in the Kremlin's foreign policy strategy. For example, since

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[2]https://www.grid.news/story/global/2022/05/18/how-china-uses-global-media-to-spread-its-views-and-misinformation/

February 2022 several pro-Putin events that were then joined by far-right extremists were organized in Germany by the Russian diaspora.[3] A similar pattern can be observed in the US, where the Russian-speaking community was active in speading a pro-Kremlin agenda.[4] Russian foreign influence is thus not limited to its neighboring countries, but can be described as a worldwide phenomenon. However, empirical research on the specific effects, influence and channels of Russian propaganda on Russian-speaking communities abroad has been rare so far. It is this research gap that we try to fill with this paper, by investigating one context where Russian-speaking communities play a particular important role – the former Soviet republics in Central Asia.

Theoretically, our paper is based on Guiso and Makarin (2020), in that we hypothesize that Russian speakers think of information conveyed in Russian as *trustworthy*. According to this theory, genetic, cultural, or religious affinity enhances trust (Guiso and Makarin 2020). In our paper, we denote language as – perhaps the most important – trait of cultural proximity, and try to separate it from other connections, such as personal connections, with a family member working in Russia and transmitting remittances. We thus hypothesise that Russian-speakers are particularly susceptible to information that is conveyed in the Russian language.

The remainder of our paper is structured as follows: section 2 presents our data and provides summary statistics, followed by an empirical analysis presenting preliminary results in section 3. Section 4 concludes.

2 Data

We collected data from a series of three surveys conducted by the Central Asia Barometer in Kazakhstan, Kyrgyzstan and Uzbekistan in May 2021, October 2021 and June 2022.[5] While all three survey waves include a wealth of information on public opinion, including a question on attitudes towards Russia, the United States, and the Eurasian Economic Union, only the last wave of June 2022 includes a number of questions related to Russia's full-scale

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[3]https://theins.ru/politika/258094

[4]https://theins.ru/politika/256770

[5]https://www.ca-barometer.org/en

invasion of Ukraine, two of which we use for this paper:

1. *"In your view, who is mainly responsible for the situation in Ukraine?"*

   The question allowed the following pre-coded answers: *"Russia", "Ukraine", "The United States", "NATO, Europe/the EU"*, and was not asked in Uzbekistan.

2. *"To what extent do you think Russia's special military operation in Ukraine is justified or unjustified?"*

   The question allowed the following pre-coded answers: *"Completely justified", "Somewhat justified", "Somewhat unjustified", "Completely unjustified", "Refused to answer", "Don't know".*

The question on attitudes towards Russia and the United States was formulated as follows:

- *"Thinking about other countries, please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of (Russia/the United States)".*

The question on attitudes towards the Eurasian Economic Union reads as follows

- *"As you may know, since 2015, our country has been a member of the Eurasian Economic Union with Russia, Belarus, and Armenia. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree that joining the Eurasian Economic Union has benefited our country's national economy?"* [6]

Finally, all three survey waves also include an extensive block of questions related to:

- The source of news most often used to get information about what is going on outside of the respondent's country (including relatives and friends, national and Russian traditional media, the internet).

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[6]For Uzbekistan, the question is the following *"As you may know, our country recently became an observer of the Eurasian Economic Union. Which of the following three statements is closest to what you think? (Our country should have no involvement in the Eurasian Economic Union; Our country should stay an observer of the Eurasian Economic Union; Our country should become a full member of the Eurasian Economic Union)"*

- The messaging apps most often used (WhatsApp, Telegram, etc.).

- The social media platform most often used (FB, Odnoklassniki, VKontakte, Instagram, Twitter, TikTok, etc.).

- The language that is spoken at home, the language of the interview, and a full set of standard demographics, including ethnicity.

Columns 1 and 2 of Table 1 provide descriptive statistics on language and ethnicity. We see that the share of Russian-speakers in our sample is at 44.9% for Kazakhstan, 12.5% for Kyrgyzstan, and 5.5% for Uzbekistan. The percentage of respondents that answered the survey in Russian is even higher: 73% in Kazakhstan, 19% in Kyrgyzstan, and 5.5% in Uzbekistan. For all three countries, the share of respondents that consider Russian their main language is 2-3 times higher than the share of ethnic Russians, enabling us to disentangle the effects of ethnicity from those of language-use.

In Kazakhstan and Kyrgyzstan, there is a substantial portion of the population believing that Western countries and Ukraine are mainly responsible for the situation in Ukraine. In Kazakhstan and Kyrgyzstan, most of the population does not believe that Russia's SMO in Ukraine is justified, while in Uzbekistan the situation seems to be the opposite.

Table 1: Descriptive statistics for surveys

Country	Obs.	Russian (%) Language	Ethnicity	War responsibility (%) Russia	West	Ukraine	Average of justified SMO	Average opinion of Russia	US	Average opinion of EAEU
Kazakhstan	5,009	44.88	20.64	27.8	10.5	18.6	2.15	2.83	2.68	2.94
Kyrgyzstan	5,016	12.52	4.19	16.1	15.4	33.6	2.46	3.19	2.80	2.89
Uzbekistan	5,009	5.53	1.42				2.97	3.30	2.80	3.35

Note. For each country, the wave of May 2021 includes 2000 obs, and waves of October 2021 and June 2022 include around 1500 obs. each. All the percentages are calculated as shares of the number of observations in a respective wave. In the question "SMO is justified" 1 means "Completely unjustified" and 4 means "Completely justified". In the question "Opinion of Russia/US" 1 means "Very unfavorable" and 4 means "Very favorable". War responsibility = West if a respondent has chosen US, EU, or NATO.

Table 2 shows channels through which Russian propaganda can potentially affect respondents' beliefs. The reach of Russian TV is quite marginal, and its consumption substantially decreased in Kazakhstan after the start of the war. In all countries, people mostly use the internet to inform themselves. Regarding social media and messengers, the war did not

substantially affect their usage. The share of remittances in household income was also not substantially affected by the war.

Table 2: Descriptive statistics for channels

| | Kazakhstan | | Kyrgyzstan | | Uzbekistan | |
	2021	2022	2021	2022	2021	2022
News Russian TV	7.2	4.1	6.8	7.3	4.5	3.7
News internet	59.4	65.5	70.8	71.9	52.0	60.2
Use VK or OK	15.1	11.1	6.4	5.8	7.3	4.4
Use Facebook	8.7	8.8	19.8	16.7	9.4	11.3
Use Instagram	50.8	48.5	44.9	42.0	23.0	28.2
Use TikTok	7.7	14.6	9.8	16.0	12.5	9.7
Use Telegram	6.0	7.5	5.0	6.7	74.0	76.7
Use WhatsApp	88.2	88.9	91.2	90.1	14.7	14.6
Absence of remittance	88.2	90.9	75.6	72.4	74.4	75.7

Note. Table shows the percentage of media usage. The row "Absence of remittance" shows the share of the households that do not rely on remittance.

3 Empirical Strategy and Results

3.1 Language Proximity and Justification of the War in Ukraine

In a first step, we study how linguistic proximity to Russia is affecting justification for the "Special Military Operation" (SMO) by Russia in Ukraine. We use the survey wave conducted in June 2022, and consider the following linear equation:

$$y_{il} = \alpha L_{il} + \mathbf{X_{il}}\beta + \lambda_l + \epsilon_{il}. \tag{1}$$

Here i denotes respondent and l denotes location.[7] The binary variable L_{il} is 1 if a respondent speaks Russian most often at home, and otherwise 0. The vector $\mathbf{X_{il}}$ includes our set of controls variables: gender, age category, university education (or higher), household size, settlement type, and ethnicity as a set of dummy variables (including Russian ethnicity). The variable λ_l is the location fixed effect. We first pool all three countries together, and then

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[7]The locations are central cities of sub-national regions, and sub-national regions for smaller settlements.

show separate results for Kazakhstan (first including and then excluding ethnic Russians).

Table 3 considers three separate dependent variables y_{il}:

- How confident a respondent is that the SMO is justified.

- A respondent's opinion of Russia.

- A respondent's opinion of the US.

All three variables have discrete values from 1 to 4. Table 3 depicts our results, and shows that in June 2022, Russian-speaking respondents were more confident that the SMO is justified and had a more positive opinion of Russia than non-Russian speaking respondents. There was no significant effect of the language on attitudes to the US. All results are especially prominent for Kazakhstan, where they hold even for ethnically non-Russians.

Table 3: SMO justification and opinion of Russia and the US

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	SMO is justified			Opinion of Russia			Opinion of the US		
Russian language	0.21***	0.38***	0.35***	0.13**	0.28***	0.26***	0.035	0.060	0.078
	(0.063)	(0.087)	(0.090)	(0.050)	(0.075)	(0.078)	(0.055)	(0.077)	(0.078)
Observations	3,137	1,121	910	4,171	1,380	1,141	3,707	1,265	1,049
R-squared	0.202	0.245	0.168	0.173	0.160	0.109	0.130	0.154	0.091
Waves	2022	2022	2022	2022	2022	2022	2022	2022	2022
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table shows the results of regression (1) for discrete dependent variables measured from 1 to 4: "SMO is justified" (columns 1-3), "Opinion of Russia" (columns 4-6), "Opinion of the US" (columns 7-9). Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.

As the next step, we consider a set of binary variables assigning responsibility for the war in Ukraine to three possible actors – Russia, Ukraine, or the West for our dependent variable y_{il} in equation (1). Table 4 shows that Russian-speaking respondents are less likely to blame Russia as the responsible side for the war. They do not blame Ukraine, but are more likely to blame the US, the EU and/or NATO for the war, compared to non-Russian

speakers. As before, the effects are stronger for Kazakhstan, and hold for ethnically non-Russian respondents, outlining the importance of language-use (and not only ethnicity) in shaping political opinions.

Table 4: Responsibility for the situation in Ukraine

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	War responsibility: Russia			War responsibility: Ukraine			War responsibility: US,EU,NATO		
Russian language	-0.047*	-0.088**	-0.080**	-0.0025	0.022	0.025	0.066***	0.12***	0.11***
	(0.022)	(0.036)	(0.037)	(0.021)	(0.030)	(0.030)	(0.016)	(0.023)	(0.024)
Observations	3,019	1,509	1,253	3,019	1,509	1,253	3,019	1,509	1,253
R-squared	0.155	0.100	0.074	0.157	0.046	0.040	0.100	0.125	0.104
Waves	2022	2022	2022	2022	2022	2022	2022	2022	2022
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table shows the results of regression (1) for binary dependent variables emphasizing the most responsible side for the war: Russia (columns 1-3), Ukraine (columns 4-6), Western countries (columns 7-9). Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.

3.2 How does Language Proximity affect Opinions? Potential Channels

In this section, we study a set of potential channels through which Russian language-use can result in justification of the war in Ukraine, a result that we find – for Kazakhstan – even for the ethnically non-Russian population.

We start by considering three channels of information that have traditionally played an important role in Central Asia countries - Russian TV news, internet news, and labor migration, and use them as dependent variables in our equation (1). Table 5 depicts our results, and shows that Russian-speaking respondents are not more likely than non-Russian speakers to consume Russian TV news, nor is there a significant difference with respect to the importance of remittances in household income. However, Russian-speaking respondents are significantly more likely to inform themselves via the internet news, as compared to non-Russian speakers.

In a second step, we examine the importance of different social media channels, namely VKontakte (VK), Odnoklassniki (OK), Telegram, WhatsApp, Facebook, Instagram, and

Table 5: Channels for Russian propaganda export: Russian TV, Internet, Labor migration

VARIABLES	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
	Russian TV News			Internet News			Absence or remittance		
Russian language	0.0012	-0.015	-0.023*	0.075***	0.12***	0.12***	0.031*	0.016	0.024
	(0.012)	(0.013)	(0.013)	(0.025)	(0.034)	(0.035)	(0.019)	(0.022)	(0.022)
Observations	4,523	1,509	1,253	4,523	1,509	1,253	4,523	1,509	1,253
R-squared	0.083	0.072	0.061	0.107	0.123	0.120	0.099	0.056	0.065
Waves	2022	2022	2022	2022	2022	2022	2022	2022	2022
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table shows the results of regression (1) for binary dependent variables: News from Russian TV (columns 1-3), News from internet (columns 4-6), Absence remittance (columns 7-9). Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.

TikTok. VK and OK are social media owned by Russian government. The former is more popular among younger people, while the latter is used mainly among the older population. Among the above named channels, both VK and Odnoklassniki as well as Telegram have been intensely used by Russian government propaganda, especially since February 2022. Telegram in particular has become a platform where many pro-Russian bloggers with often large audiences are providing information about the war in Ukraine, from a Russian perspective.[8] Facebook and Instagram, on the other hand, are blocked in Russia, WhatsApp is mostly used as messenger but not as media channel, and TikTok is mostly hosting entertainment content. These for platforms are thus less relevant as channels of Russian propaganda.

Table 6 depicts our findings for VK, OK, Telegram and WhatsApp, and shows that Russian-speaking respondents are indeed significantly more likely to use VK and Odnoklassniki than non-Russian speaking respondents. In Kazakhstan, Telegram is also more popular among the Russian-speaking population. WhatsApp, on the other hand, is used with equal frequency by both groups.

Finally, Table 7 depicts our findings for Facebook, Instagram and TikTok. We see that all three platforms are equally likely to be used by Russian and non-Russian speaking pop-

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[8]See for example https://www.dw.com/en/russian-war-bloggers-pawns-in-a-political-game/a-64284496, or https://www.themoscowtimes.com/2022/09/14/explainer-who-are-russias-pro-war-bloggers-and-why-are-they-important-a78793

ulations.

Table 6: Channels for Russian propaganda export: VK/OK, Telegram, WhatsApp

	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
VARIABLES	Use VK or OK			Use Telegram			Use WhatsApp		
Russian language	0.089***	0.093***	0.096***	0.028	0.051*	0.054**	-0.029	-0.045	-0.046
	(0.018)	(0.027)	(0.027)	(0.019)	(0.027)	(0.028)	(0.019)	(0.029)	(0.030)
Observations	4,523	1,509	1,253	4,523	1,509	1,253	4,523	1,509	1,253
R-squared	0.097	0.134	0.092	0.540	0.049	0.048	0.563	0.034	0.032
Waves	2022	2022	2022	2022	2022	2022	2022	2022	2022
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table shows the results of regression (1) for binary dependent variables: Use VK or Odnoklassniki (columns 1-3), Use Telegram (columns 4-6), Use WhatsApp (columns 7-9). Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.

Table 7: Channels for Russian propaganda export: Facebook, Instagram, TikTok

	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
VARIABLES	Use Facebook			Use Instagram			Use TikTok		
Russian language	-0.0094	-0.012	-0.0092	-0.043*	-0.050	-0.046	-0.017	-0.030	-0.033
	(0.018)	(0.022)	(0.023)	(0.025)	(0.036)	(0.037)	(0.019)	(0.026)	(0.027)
Observations	4,523	1,509	1,253	4,523	1,509	1,253	4,523	1,509	1,253
R-squared	0.100	0.099	0.115	0.184	0.192	0.178	0.052	0.051	0.052
Waves	2022	2022	2022	2022	2022	2022	2022	2022	2022
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table shows the results of regression (1) for binary dependent variables: Use VK or Odnoklassniki (columns 1-3), Use Telegram (columns 4-6), Use WhatsApp (columns 7-9). Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.

3.3 Dynamics of Opinion Change and Media Consumption

Apart from being influenced through social media and the internet, another potential channel that could explain our results from Tables 3 and 4 is that Russian-speaking populations in Central Asia have always been more pro-Russia than non-Russian speaking populations, as

they have been sharing long-term historical and cultural ties and views with the Russian population in Russia. If this is the case, we would expect that this group always held a more favorable view of Russia, and a less favorable view of the US than the group of non-Russian speakers.

To examine this argument and the dynamic evolution of opinions on Russia, the US and the Eurasian Economic Union, we use the two survey waves from 2021 in combination with the survey wave from June 2022, and estimate the following model:

$$y_{ilt} = \alpha L_{ilt} + \gamma W_t + \delta L_{ilt} \cdot W_t + \mathbf{X_{ilt}}\beta + \lambda_l + \mu_t + \epsilon_{ilt}. \tag{2}$$

Here i denotes respondent, l denotes location and t is the survey wave (May 2021, October 2021 or June 2022). The binary variable L_{ilt} equals one for Russian-speaking, and the binary variable W_t equal one for the period of war in Ukraine. The vector $\mathbf{X_{ilt}}$ includes the same set of control variables as in (1), and μ_t are the survey wave fixed effects. The design of the regression is similar to a standard DID design, though there is no unaffected (control) group. That is, the coefficient α shows the gap in y_{ilt} between the Russian and non-Russian speaking population before the war, and the coefficient δ shows the change in this gap in June 2022.

We consider the following discrete variables with values from 1 to 4 as our dependent variables:

- A respondent's opinion of Russia.

- A respondent's opinion of the United States.

- A respondent's opinion of the Eurasian Economic Union.

As before, we first pool all three countries together, and then show results for Kazakhstan separately (first including, and then excluding the ethnic Russian population).

Table 8 shows the results. Before the war (coefficient α), the Russian-speaking respondents had the same opinion of Russia and the Eurasian Economic Union as non-Russian-speaking respondents. Interestingly, before 2022 Russian-speaking respondents in Kaza-

Table 8: Opinion of Russia, US and Eurasian Economic Union in dynamics

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Opinion of Russia			Opinion of the US			Opinion EAEU		
Russian language (α)	0.022	-0.0059	0.021	0.051	0.14***	0.13***	-0.025	0.025	0.035
	(0.025)	(0.038)	(0.040)	(0.032)	(0.045)	(0.047)	(0.036)	(0.051)	(0.055)
June 2022 (γ)	-0.24***	-0.55***	-0.56***	-0.052**	-0.0034	-0.0093	-0.11***	-0.021	-0.013
	(0.017)	(0.041)	(0.042)	(0.023)	(0.046)	(0.047)	(0.025)	(0.051)	(0.052)
Rus. Lang * June 2022 (δ)	0.11***	0.41***	0.31***	-0.082*	-0.17***	-0.10	0.19***	0.13**	0.098
	(0.036)	(0.055)	(0.069)	(0.045)	(0.064)	(0.076)	(0.046)	(0.068)	(0.084)
Observations	14,036	4,582	3,615	12,256	4,128	3,287	12,387	4,051	3,225
R-squared	0.124	0.120	0.108	0.102	0.119	0.073	0.085	0.063	0.051
Waves	All	All	All	All	All	All	All	All	All
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table shows the results of regression (2) for discrete dependent variables measured from 1 to 4: "Opinion of Russia" (columns 1-3), "Opinion of the US" (columns 4-6), "Opinion of the Eurasian Economic Union" (columns 7-9). Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses. The test for parallel pre-trends is shown in Table **??**

khstan even had a more positive attitude towards the US then non-Russian speaking respondents.

These results change substantially after the start of Russia's full-scale invasion of Ukraine in February 2022 (coefficient δ). In June 2022, Russian-speaking respondents had a significantly better opinion of Russia and of the EAEU than non-Russian-speaking respondents ($\delta > 0$), while overall opinion decreased compared to 2021 ($\gamma < 0$). Moreover, the positive attitude of Russian-speaking respondents towards the US decreased substantially stronger than for non-Russian-speaking respondents ($\delta < 0$). As a result, there was no longer a gap in attitudes towards the US between Russian and non-Russian speaking respondents (columns 7 - 9 in Table 3). These results suggest that the argument that the Russian-speaking population in Central Asia is more supportive of the current war because they have always been closer to Russia and share historical and cultural ties and views with the Russian population does not hold.

If it is not long-term cultural affinity, what then could have caused the relatively sudden and drastic shift in public opinion among Central Asia's Russian-speaking populations that we can observe in June 2022? We argue that social media and the internet are one of the most important channels through which Russian propaganda has managed to shift opinions

since February 2022. To elaborate this point, we first document the dynamic changes in media consumption before and after the start of the war, and then use an IV strategy in section 3.4 to test for the direct effect of media consumption on opinions about the war.

To document changes in media consumption, we use the model (2) with three potential media channels as binary dependent variable: Russian TV news; Internet news; VK or Odnoklassniki (VK/OK); and Telegram.

Table 9: Channels for Russian propaganda export in dynamics

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Russian TV News			Internet News			Use VK or OK			Use Telegram		
Russian language (α)	0.048***	0.043***	0.045***	0.047***	0.073***	0.070***	0.071***	0.065***	0.065***	0.019*	0.012	0.0083
	(0.0086)	(0.011)	(0.011)	(0.015)	(0.020)	(0.021)	(0.011)	(0.016)	(0.016)	(0.010)	(0.012)	(0.012)
June 2022 (γ)	-0.0027	-0.013*	-0.011	0.046***	0.062***	0.067***	-0.027***	-0.044***	-0.045***	0.015**	-0.00028	-0.0017
	(0.0043)	(0.0076)	(0.0075)	(0.0099)	(0.020)	(0.020)	(0.0050)	(0.011)	(0.011)	(0.0068)	(0.010)	(0.010)
Rus. Lang * June 2022 (δ)	-0.040***	-0.044***	-0.052***	0.013	0.023	0.032	0.0060	0.017	0.0091	0.014	0.034**	0.049**
	(0.012)	(0.014)	(0.016)	(0.020)	(0.029)	(0.034)	(0.016)	(0.021)	(0.025)	(0.014)	(0.017)	(0.021)
Observations	15,034	5,009	3,975	15,034	5,009	3,975	15,034	5,009	3,975	15,034	5,009	3,975
R-squared	0.081	0.104	0.073	0.116	0.115	0.110	0.076	0.097	0.065	0.538	0.028	0.027
Waves	All	All	All	All	All	All	All	All	All	All	All	All
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table shows the results of regression (2) for binary dependent variables: Watching Russian TV news (columns 1-3), reading Internet News (columns 4-6), Use VK or Odnoklassniki (columns 7-9), Use Telegram (columns 10-12). Columns 1, 4, 7, 10 include respondents from all countries. Columns 2, 5, 8, 11 include respondents from Kazakhstan only. Columns 3, 6, 9, 12 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses. The test for parallel pre-trends is shown in Table A2

Table 9 shows the results. Before the war, the Russian-speaking population in Central Asia was significantly more likely to consume Russian TV news than after the war. As Russian TV only played a relatively marginal role even before the war (see Table 2), this suggests that Russian TV news played a minor role, if any, in influencing Russian-speaking populations in Central Asia during the war. The situation is different with respect to the use of the internet and social media as a source of information. Columns 4 - 9 in Table 9 show that Russian-speaking respondents were significantly more likely than non-Russian speaking respondents to use both channels as sources of information, even before the war, and the gap in use of these source has not changed since the start of the war. We therefore assume that both channels have played an important role as a mechanism to explain the opinion shift between the Russian and non-Russian speaking populations in Central Asia since the start of the war. Finally, we also find an interesting result for the use of Telegram, which increased significantly for Russian-speaking populations in Kazakhstan since the start of the war, especially for ethnically non-Russians.

3.4 The Effect of Social Media on Attitude about the War in Ukraine

The abovementioned results suggest that internet media is the main channel through which the linguistic affinity can affect the opinion of Russian-speaking population in Central Asia since the start of the war. This enables to identify the direct effect of internet media use on support of Russia's war in Ukraine. In table 10, we present an IV regression results with Russian-language being an instrumental variable for internet media. These regressions control for the same set of characteristics as the one in (1). As the set of controls include Russian ethnicity as a dummy variable, we do not confound the language and the ethnicity. We do indeed find that internet news, and use of VK and OK positively and significantly increase the justification for the war, and blame the Western countries for the war. Our results suggest that Telegram serves in the same manner for Kazakhstan. All in all, we conclude that internet media extensively used by Russian propaganda do play an important role in shaping public opinion among Russian-speaking citizens of Kazakhstan, Kyrgyzstan and Uzbekistan.

4 Conclusion

To test if language affinity facilitates the export of propaganda by authoritarian regimes during times of war, we analyze data from three survey waves conducted in Kazakhstan, Kyrgyzstan, and Uzbekistan on May 2021, October 2021, and June 2022, that is before and after Russia's full-scale invasion of Ukraine. We find that after the start of the war, Russian-speaking respondents were more likely to justify Russia's war in Ukraine, to negate Russian responsibility and to blame Western countries for the war even after controlling for ethnicity. We argue that the main channels through which these shifts of opinion have taken place are consumption of news from the internet and Russian social media, while the importance of Russian TV as a channel for pro-Russian propaganda was relatively minor, and has further declined since February 2022.

Table 10: IV Estimates of Media Effects on Attitudes to the War in Ukraine

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Panel A: SMO is justified					
Internet News	3.17*	2.53***	2.21***						
	(1.64)	(0.84)	(0.77)						
Use VK or OK				2.97**	5.21**	4.67**			
				(1.18)	(2.43)	(2.16)			
Use Telegram							7.56	6.37*	5.59*
							(6.20)	(3.71)	(3.22)
Observations	3,137	1,121	910	3,137	1,121	910	3,137	1,121	910
Cragg-Donald Wald F	5.56	14.57	15.8	17.89	6.96	9.13	1.85	5.73	5.99
Kleibergen-Paap Wald rk F	5.96	18.06	19.44	12.2	5.65	6.07	1.71	3.59	3.8
				Panel B: War responsibility: Russia					
Internet News	-0.66	-0.74*	-0.67*						
	(0.48)	(0.39)	(0.38)						
Use VK or OK				-0.60*	-0.95**	-0.84**			
				(0.36)	(0.44)	(0.42)			
Use Telegram							-1.12	-1.71	-1.48
							(0.85)	(1.18)	(1.06)
Observations	3,019	1,509	1,253	3,019	1,509	1,253	3,019	1,509	1,253
Cragg-Donald Wald F	6.67	11.2	11.08	22.21	15.82	21.06	7.05	6.25	6.74
Kleibergen-Paap Wald rk F	7.2	12.43	12.14	15.76	12.2	13.01	4.51	3.65	3.86
				Panel C: War responsibility: US, EU, NATO					
Internet News	0.93**	0.99***	0.88***						
	(0.44)	(0.34)	(0.31)						
Use VK or OK				0.84***	1.27***	1.11***			
				(0.33)	(0.44)	(0.39)			
Use Telegram							1.57*	2.29*	1.96*
							(0.90)	(1.30)	(1.10)
Observations	3,019	1,509	1,253	3,019	1,509	1,253	3,019	1,509	1,253
Cragg-Donald Wald F	6.67	11.2	11.08	22.21	15.82	21.06	7.05	6.25	6.74
Kleibergen-Paap Wald rk F	7.2	12.43	12.14	15.76	12.2	13.01	4.51	3.65	3.86
Waves	2022	2022	2022	2022	2022	2022	2022	2022	2022
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** $p<0.01$, ** $p<0.05$, * $p<0.10$. The table shows the results of IV estimates, where we use the binary variable Russian language as an instrument for media information source. The control variables are similar to (1). Panel A considers variable "SMO is justified" with four discrete values. Panel B considers the binary variable if "Russia is mainly responsible". Panel C considers the binary variable if "US, EU, NATO are mainly responsible". Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.

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A   Appendix

Table A1: Opinion of Russia, US and Eurasian Economic Union in dynamics, parallel pre-trends check

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Opinion of Russia			Opinion of US			Attitude to EAEU		
Russian language	0.050	0.030	0.044	0.066	0.15**	0.11*	-0.090*	-0.032	-0.013
	(0.033)	(0.051)	(0.057)	(0.043)	(0.061)	(0.065)	(0.047)	(0.067)	(0.076)
May 2021	0.13***	0.18***	0.19***	-0.043*	0.013	0.00092	-0.051**	-0.055	-0.051
	(0.016)	(0.043)	(0.043)	(0.023)	(0.052)	(0.052)	(0.024)	(0.056)	(0.056)
June 2022	-0.11***	-0.38***	-0.38***	-0.098***	0.0071	-0.0018	-0.16***	-0.055	-0.052
	(0.019)	(0.047)	(0.048)	(0.025)	(0.053)	(0.053)	(0.026)	(0.057)	(0.057)
Rus. Lang * May 2021	-0.050	-0.065	-0.044	-0.027	-0.013	0.044	0.12**	0.10	0.090
	(0.035)	(0.057)	(0.068)	(0.048)	(0.072)	(0.082)	(0.051)	(0.078)	(0.095)
Rus. Lang * June 2022	0.080*	0.38***	0.29***	-0.098*	-0.18**	-0.080	0.26***	0.19**	0.15
	(0.042)	(0.066)	(0.080)	(0.054)	(0.078)	(0.089)	(0.055)	(0.082)	(0.099)
Observations	14,036	4,582	3,615	12,256	4,128	3,287	12,387	4,051	3,225
R-squared	0.125	0.120	0.108	0.102	0.119	0.073	0.085	0.063	0.051
Waves	All	All	All	All	All	All	All	All	All
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table checks the parallel pre-trends assumption for discrete dependent variables measured from 1 to 4: "Opinion of Russia" (columns 1-3), "Opinion of the US" (columns 4-6), "Opinion of the Eurasian Economic Union" (columns 7-9). Columns 1, 4, 7 include respondents from all countries. Columns 2, 5, 8 include respondents from Kazakhstan only. Columns 3, 6, 9 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.

Table A2: Channels for Russian propaganda export in dynamics, parallel pre-trends check

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Russian TV News			Internet News			Use VK or OK			Use Telegram		
Russian language	0.037***	0.036***	0.038***	0.048**	0.059**	0.071**	0.075***	0.071***	0.065***	0.016	0.0083	0.00074
	(0.011)	(0.013)	(0.014)	(0.019)	(0.027)	(0.029)	(0.015)	(0.020)	(0.021)	(0.013)	(0.015)	(0.016)
May 2021	-0.0053	0.0083	0.0096	0.0069	-0.026	-0.026	0.0100*	0.020	0.022*	0.0019	0.0062	0.0069
	(0.0045)	(0.0076)	(0.0075)	(0.010)	(0.022)	(0.022)	(0.0054)	(0.013)	(0.013)	(0.0070)	(0.011)	(0.011)
June 2022	-0.0063	-0.0018	0.00028	0.053***	0.041*	0.041*	-0.018***	-0.027**	-0.023**	0.017**	0.0075	0.0072
	(0.0047)	(0.0075)	(0.0073)	(0.011)	(0.023)	(0.023)	(0.0052)	(0.012)	(0.011)	(0.0075)	(0.011)	(0.011)
Rus. Lang * May 2021	0.019	0.013	0.012	-0.0030	0.024	-0.0013	-0.0062	-0.012	0.0015	0.0056	0.0076	0.014
	(0.014)	(0.017)	(0.020)	(0.022)	(0.032)	(0.037)	(0.018)	(0.024)	(0.028)	(0.014)	(0.016)	(0.020)
Rus. Lang * June 2022	-0.029**	-0.037**	-0.046**	0.011	0.036	0.031	0.0024	0.011	0.0099	0.017	0.038**	0.057**
	(0.014)	(0.017)	(0.018)	(0.024)	(0.034)	(0.039)	(0.019)	(0.025)	(0.029)	(0.016)	(0.019)	(0.024)
Observations	15,034	5,009	3,975	15,034	5,009	3,975	15,034	5,009	3,975	15,034	5,009	3,975
R-squared	0.081	0.104	0.073	0.116	0.115	0.110	0.076	0.097	0.065	0.538	0.028	0.027
Waves	All	All	All	All	All	All	All	All	All	All	All	All
Ethnicity	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.	All	All	Non Rus.
Countries	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ	All	KAZ	KAZ

Note. Significance levels: *** p<0.01, ** p<0.05, * p<0.10. Table checks the parallel pre-trends assumption for binary dependent variables: Watching Russian TV news (columns 1-3), reading Internet News (columns 4-6), Use VK or Odnoklassniki (columns 7-9), Use Telegram (columns 10-12). Columns 1, 4, 7, 10 include respondents from all countries. Columns 2, 5, 8, 11 include respondents from Kazakhstan only. Columns 3, 6, 9, 12 include ethnically non-Russian respondents from Kazakhstan only. Robust standard errors in parentheses.