

Full Length Article

Support for Vladimir Putin in Russia's neighbors: Survey evidence from an endorsement experiment in six post-Soviet countries

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A B S T R A C T

The Russian invasion of Ukraine on February 24, 2022 has again drawn attention to the geopolitical aims of President Vladimir Putin in the states of the former Soviet Union, the 'Near Abroad'. While Putin's actions have been widely condemned in the West, the reaction among the former Soviet states has been more mixed. Using representative national surveys from late 2019 - early 2020, the article reports the results of an endorsement experiment to gauge the support that Putin had in six countries of the former Soviet space (Ukraine, Moldova, Kazakhstan, Belarus, Georgia and Armenia). Direct questioning about Putin revealed that half of the 8420 respondents said that they had 'no trust at all' though views varied a lot by country. Given the sensitivity around perceptions of Putin, an endorsement experiment elicits more accurate results. Five expectations of who supports Putin are tested in models with socio-demographic controls. Respondents with more close-minded personalities show significantly more support for Vladimir Putin, our key test. People who are skeptical of scientific expertise and those with traditional views (measured by a question about patriarchal dominance in marriages) are also more likely to support Putin. In contrast, support for Putin is not significantly greater by those who subscribe to conspiracy theories, and by those with little interest in politics. Country level results are generally in line with the results of the overall model, but demonstrate some interesting variation. Vladimir Putin overall has higher trust and support in Belarus, Armenia, and Kazakhstan than in Ukraine, Georgia, and Moldova but the respondents in all countries behave in a manner consistent with their personal traits in endorsing or opposing Putin's positions.

Vladimir Putin has dominated the political landscape of post-Soviet politics in the first two decades of the new millennium. His launch of the attack on Ukraine in February 2022 followed earlier international interventionism in Crimea and Donbas since 2014, in Syria in 2015, in Georgia in 2008, and domestically, in Chechnya at the outset of his career in 1999. Upon appointment by Boris Yeltsin and his subsequent elections as President, Putin's initial image was that of a competent bureaucrat. But the challenges he immediately faced from terrorist bombings and separatism in the North Caucasus of Russia, and how he responded, quickly transformed this image. To Kremlin spin masters, Russia had a tough new leader, a plain-spoken and direct-action *silovik* (a person from the security/military services) whom it needed to confront the terrorists who stalked it (Satter, 2016).

The story of Vladimir Putin's emergence as a new Russian strongman is well known (e.g., Roxburgh, 2012; Seligson & Tucker, 2005). Kremlin political technologists enhanced Putin's image as a competent and virile leader, a man fit for the demands of the job (Sperling, 2015; Tempest, 2016). Over the past two decades, Putin's popularity has waxed and waned within the Russian Federation but he has always retained a

mid-to high-range level of popularity (60–85 percent approval) according to polls by the independent Levada Center (<https://www.levada.ru/en/>). The innate advantages of incumbency, longevity, suppression of opposition and dissent, and relative media monopoly have kept Putin's popularity high (Rose et al., 2011; Hale & Colton, 2017; Hale, 2022), even if the real values are in the range of 10 percent lower (Enikolopov et al., 2011; Frye, 2021; Frye et al., 2017, 2023). In time, as Putin's regime centralized power, visible and influential independent sources of critique and satire were eliminated (Ostrovsky, 2015). Backed by a formidable information management and propaganda apparatus, Putin became more than a mere political leader. He was vaulted to the status of a celebrity, a cultural icon, and symbol of a strongman leader, one known not only in Russia and the post-Soviet region but across the world (Goscilo, 2013).

In June 2022, as Russia's war against Ukraine was used to incite a rally-round-the-flag effect in Russian society, Putin's popularity jumped to 83% (<https://www.levada.ru/en/ratings/>). Critics argue that this high score is a product of state media manipulation and control, as well as of social desirability bias (Alyukov, 2022; Chapkovski & Schaub,

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2022). This media ecology extends well beyond Russia and, as a dominant figure who has embodied the Russian state and its policies for decades, Putin has a reputation and image that is difficult to avoid in the post-Soviet region, and beyond in Europe and globally. That reputation, of course, has shifted back and forth over the last two decades and, in the wake of the invasion of Ukraine, it is undergoing a further process of revision that carries strong affective reaction and emotion. Few political figures dominate the domestic and foreign profiles of a state like Putin does for Russia and people's emotions showed a significant change in the wake of the 2014 Crimean annexation (Greene & Robertson, 2022). The perception of Russia as equivalent to Putin and Putin as Russia has become concretized due to his longevity in office and by his actions, most recently and dramatically with the large-scale invasion and subsequent destruction of much of Ukraine.

That the war in Ukraine has polarized public opinion about Putin outside of Russia is not news. But even before the war, in 2021, about two-thirds of people surveyed in 14 important Western countries disapproved of him, with less than 30 percent of the population viewing him favorably. In all but one country (Italy), views of Putin had become significantly less favorable over the previous 15 years (Huang, 2020). Though Putin's reputation and Russia's status are relatively low in the West, the same is not true for other world regions. In Central Asia, traditionally central to Russia's geopolitical ambitions, Russia was ranked more favorably and positively on a variety of economic and political indicators than either the United States or China (Laruelle & Royce, 2020).

Because of Russia's preponderant cultural and media power, to say nothing of enduring economic and familial ties, Russia's neighbors know Putin's image well (Mankoff, 2022; Ohanyan, 2022). In this paper, we examine what people think of him in a number of states that were previously part of the Soviet Union, commonly known in Russia as the 'Near Abroad'. Myers (2015, p. 480) concludes his biography of Putin by observing that he had "restored neither the Soviet Union nor the Tsarist empire, but a new Russia with the characteristics and instincts of both, with himself as general secretary and sovereign." Through nationally representative surveys conducted in 2019–2020, our goal was to answer subsequent intuitive questions. How powerful is Putin's appeal in lands now beyond Russia but that were previously part of the Soviet Union and the Tsarist empire? Given that Russia is the dominant economic and military power in the neighborhood and that the Kremlin is an active player in separatist conflicts in Georgia, Moldova, Azerbaijan, and Ukraine, does Putin's influence break in predictable ways, with people in Russia-aligned states (such as Belarus and Armenia) more likely to support Putin's policies than people in West-aspirant states like Georgia, Ukraine, and, to a certain extent, Moldova? And, our main focus, how are personal characteristics – specifically, people's open-mindedness, their belief in scientific expertise and conspiracies), their traditional vs. modern values, and their interest in politics – associated with perceptions of Putin?

To answer these questions, we rely on an original set of surveys in late 2019–early 2020 in Russia's 'Near Abroad' that include an endorsement experiment. Endorsement experimental methods can more accurately gauge support for certain policies, actions, or political figures than directly asking about sensitive issues or polarizing personalities (e.g. Bullock et al., 2017; Blair et al., 2014). Comparisons of survey methodologies indicate the advantages of endorsement approaches over others, including list approaches (Rosenfeld et al., 2015). There are different reasons why respondents may worry about expressing their true opinion of President Putin in the 'Near Abroad' – and this worry may be stronger in some countries than in others. Social desirability bias may lead respondents to hide their true preferences and, rather, respond in line with what they see as the socially desirable position, to avoid social repercussions, either from the interviewer or others who can hear their responses during the interview. For example, in countries where the population is either highly divided or (perceived to be) Western oriented (for example, Georgia and Ukraine), respondents may

downplay their faith in Putin – and they may do the opposite in countries where people are more Russian oriented. In addition, respondents may fear political repercussions for answering one way or another – that is, bias due to political, rather than social, desirability (e.g., Reisinger et al., 2023). In particular, in an authoritarian context, respondents may hide their true preferences out of fear of possible reprisals, a tactic known as preference falsification. So instead of asking people directly, the motivation behind endorsement experiments is to gauge whether some important person or group's endorsement of a relatively innocuous statement moves people's attitudes towards that person or group, compared to a control, a statement with no endorsement. Given Putin's prominence and polarizing attributes, an endorsement experimental approach is likely to gain more truthful responses than direct questioning; we also have a direct question about people's perceptions of Putin – specifically, their trust in him – for comparison across countries.

In this paper, we present a systematic examination of the power of a Putin endorsement on a contemporary issue. To do so, we needed a question that was not so geopolitically sensitive that the populations of different neighboring states had already mobilized and diverged. Therefore, we steered clear of an issue that would likely trigger zero-sum and competitive thinking on the part of a survey respondent. At the same time, we wanted to identify a topic salient enough, as well as important and relevant to the present and future of the region and its populations. Given the inevitable and inexorable emergence of climate change as a topic in international relations, Arctic Ocean oil drilling is such a topic. To what extent is support for a Putin-endorsed position explained by personal characteristics of survey respondents and by country location?

To understand the strength of Putin's appeal, we gathered information about the personal characteristics of respondents (specifically, conspiratorial tendencies, as well as cultural and social beliefs) in addition to the demographic and ideological attributes that are usually collected in representative surveys. We build on the Frye et al. (2017) study of Putin's popularity. While they did not examine the underlying motivations for Putin support or opposition, we test key propositions related to open/close-mindedness, conspiratorial beliefs, cultural conservatism, political interest, and anti/pro science attitudes. We control for other socio-demographic characteristics, media use, and people's views on Russia's role in their country, and we examine differences among six countries: Ukraine, Moldova, Belarus, Kazakhstan, Armenia, and Georgia.

1. What explains support for Vladimir Putin among Russia's neighbors?

In understanding the varying appeal of Russia's President Vladimir Putin beyond his country's borders, we start from the assumption that his personality, policies, and actions are well known to the people of Russia's neighboring states in the former Soviet Union. Since the mid-2000s, the Russian government has relied on a range of soft power mechanisms – via pro-Russian social media, television programs, films, the church, and civil society organizations – to ensure its influence in the 'Near Abroad' (e.g., Hill, 2006; Rotaru, 2018). Russian television outlets are an important source of information for many. Tensions and conflicts with Georgia and Ukraine, alliances and agreements with Kazakhstan and Belarus, and heavy Russian involvement in the territorial disputes of Armenia and Moldova mean that local politics in these countries are differently, but strongly, connected to Russia's geopolitical ambitions directed by Putin. He features prominently in national television broadcasts and the populations in the former Soviet states know a lot about him, his career, and his policies.

We develop explanations for Putin's support that consider respondents' personal characteristics, in line with the approach of Greene and Robertson (2017) who analyzed Putin's authoritarian appeal in Russia. We consider the attraction or distaste for a political leader like Putin *beyond* what is the more standard approach in political research on support for candidates and ideological or policy positions. Because of

Putin's self-inflated hypermasculine appeal, we expect that his actions will produce a level of support from certain kinds of individuals, after we control for the demographic and other personal characteristics that can affect such support. We advance five possible expectations for support for Putin that are drawn both from the growing interest in the role of personality (for both candidates and voters) in accounting for political choices (e.g. [Truex, 2022](#) for China). We also examine the expectation that many people are not very interested in political topics and derive their beliefs from non-ideological stances.

Expectation 1: People whose personalities are closed-minded (or less open-minded) will be more likely to support Vladimir Putin than those who are open-minded.

This expectation relies in part on Putin's own personality that align with his authoritarian appeal, as examined in [Greene and Robertson \(2017\)](#). Following on from the argument of [Lane \(1955\)](#) and later of [Gerber et al. \(2010, p. 116\)](#) that core dispositional personality traits are precursors to "values, [and] attitudes (including political attitudes such as ideology)", we use the well-known and widely-used 'BIG 5 scale' to measure such traits ([Gerber et al., 2011; Gosling et al. 2003](#)). While agreeableness, one of the BIG 5 personality characteristics, is key for [Greene and Robertson \(2017\)](#), we believe that another one, the "open-minded to close-minded" scale, is particularly useful for studying Putin's appeal.

People who are close-minded are expected to be traditional in outlook and conservative in values. Earlier work has shown that people sharing this personality type tend to geographically cluster in the US ([Florida, 2008](#)) and open/close-mindedness is significant in explaining environmental preferences and moral values ([Hirsh, 2010](#)). [Greene and Robertson \(2017\)](#) argue that personality traits matter indirectly, primarily by shaping media choices, basic political orientations, and attachment to the official religion – factors that, in turn, have a large effect on attitudes. These authors follow a mediating approach to see how personality (they target agreeableness) guides political choices. Though they conclude that "openness to experience, the liberal counterpart to conscientiousness in the democracies literature" has no effect in the Russian context ([Greene and Robertson, 2017, 1818](#)), we suggest that this personal trait may explain the perception of Putin's among individuals in the 'Near Abroad'. In the context of China, [Truex \(2022\)](#) considers the effect of open/close-mindedness personality in concluding that discontented citizens in contemporary China are more fearful, disagreeable, and introverted.

Putin represents a link to the Soviet past (the former KGB officer who wants to restore the USSR) and has, in various ways, presented himself as a guarantor of social stability and conservative norms in the face of external pressures to adopt globalizing and liberalizing values. We, therefore, would expect close-minded people to be more likely to support him.

We arrive at the close-minded score using the same methodology as [Greene and Robertson \(2017\)](#) and derived from the simplified 10 scale battery for the BIG 5. Though consisting of only 10 questions, the resulting scales are consistent with data from longer personality questionnaires ([Gosling et al. 2003](#)). We calculate openness based on respondents' answers on two questions: "I see myself as open to new experiences, complex" and the reverse score on the prompt of "I see myself as conventional and uncreative". As we are focusing on close-mindedness, we use low values on the openness scale as our indicator of this close-minded personality trait.

Expectation 2: People who hold conspiratorial beliefs will be more likely to support Vladimir Putin than those who do not hold such beliefs.

People who adhere to conspiracy theorists are particular types of "cognitive misers" ([Fiske & Taylor, 1984](#)). They tend to evaluate public policy questions by translating them into the terms of certain deep structural conspiracy narratives, for example, centered around malfeasance by government officials or secret global cabals. By definition, people who hold conspiratorial beliefs are prone to dismiss empirical evidence for alternative (mainstream) points of view. Their

anti-intellectualism often leads to deferral to authoritarian leader opinions; in effect, such a deferral is cognitive shortcut thinking about complex and even indeterminate problems.

We expect that respondents who accept a generic global conspiracy theory are more likely to support a position endorsed by Vladimir Putin. Conspiracy thinking has been an enduring feature of political culture in post-Soviet states, instrumentalized by both governments and opposition forces ([Radnitz, 2021](#)). 'Putinism' is built around a restorationist project and suspicion of the West. That suspicion takes the form of conspiracist thinking about Western policies and positions ([Yablokov, 2018](#)). In the post-Communist space, a conspiracy about a secret group controlling power in countries reflects the lack of trust in state institutions and a low level of political efficacy ([Marinov & Popova, 2022; Radnitz, 2021](#)). Critics of the regime, for example, are working for the West, and protests against governments in the region are 'colored revolutions' engineered by the West. Conspiracist thinking, thus, will more likely be associated with support for Putin as he is viewed as like-minded.

Across the post-Soviet space, a surprisingly high number of people (nearly half the sample) agree with our conspiracy prompt that "The spread of certain viruses and/or diseases is the result of the deliberate, concealed efforts of some organization." This generic and widely-disseminated conspiracy belief ([Goertzel, 1994](#)) gained significant traction after the global pandemic of Covid-19 became evident, but it should be noted that our data collection in the 'Near Abroad' preceded the widespread recognition of this new health threat across the globe in spring 2020. This high ratio on a conspiracy about virus is likely to be correlated with others, as people who hold one conspiratorial view are prone to hold others ([Brotherton, 2015; Harambam & Aupers, 2015; Uscinski, 2019](#)).

Expectation 3: People who reject the expertise of scientists will be more likely to support Vladimir Putin than those who do not reject such expertise.

Many people reject or are skeptical about scientific evidence for meta processes that are not easily explainable or for which empirical evidence is difficult to obtain. It is easier to support an interpretation that, while often simple, fits some pre-formed ideas about causal effects. Relatedly, alternative explanations that run counter to evidence from the scientific community are often based on religious or ideological principles ([Lewandowski & Oberdaufer, 2021](#)).

Climate change has gained a large measure of attention in the past decade, though not always in a manner that might motivate people to tackle this ominous threat to livelihoods and human sustainability. Divided opinions about the causes of climate change, about the evidence for change and about climate policies, are evident in all societies with large numbers rejecting the scientific consensus ([UNDP-University of Oxford, 2021](#)).

Vladimir Putin's cultivated image is that of a populist strong man. Throughout his political career he has presented himself as more sympathetic to the instincts of ordinary people than the formal knowledge of experts. For example, when a professor (Sergey Medvedev) in 2013 advocated multilateral stewardship of Arctic resources, Putin called him a "moron" ([Taylor, 2018, p. 17](#)). Populists tend to view intellectuals and scientists with suspicion and distrust. This leads us to expect that respondents who reject the expertise of climate scientists are more likely to support Putin. Such respondents often form opinions in a low-information bubble, one that is fostered by the complexity of the subject and the lack of clarity about possible mitigation strategies. Putin himself has only recently publicly accepted the global threat of climate change after earlier claiming that it would be beneficial to Russia ([Ivanova, 2020](#)). Given the evident risk of environmental damage from Arctic Ocean drilling, which is what our prompt is about, a position that questions scientific expertise is also more likely to defer to a prominent political leader like Putin whose environmental credentials are flawed. We measure this effect by a question that asks if the respondent "trusts scientists who warn about climate change" (on a three-point scale –

none, a little, a lot).

Expectation 4: People who are less interested in politics will be more likely to support Vladimir Putin than those who are interested in politics.

Among the many mechanisms identified by psychologists about why people hold certain positions is 'cognitive miserly' behavior. This is the tendency of people to short-circuit deliberative thinking on a certain policy question, most especially a question they know little about, by using a convenient heuristic to ease the cognitive work of thinking. In the terms of Kahneman (2011), cognitive misers are 'system one' or 'fast thinkers' more likely to be instinctual, prone to stereotypes and emotional response.

We expect that those who indicate that they are less interested in politics are more likely to be cognitive misers on public policy questions such as Arctic oil drilling. We base this expectation on research about Putin's appeal as a leader who is seen as both a regular person – 'one of us' – and also as a wise leader. Sharafutdinova (2020, p. 34) sums this up well by quoting one participant in her focus group research who stated: "People do not need to know everything. It is sufficient that Putin knows." Given Vladimir Putin's prominence in the post-Soviet (geo) political scene, we hypothesize that those less interested in politics are more likely to support him for cognitive convenience. Putin is unlike 'run-of-the-mill' politicians whose views are often unclear to the public and whose profiles are muddled for those who do not pay attention to political matters. Party, ethnicity, residence, gender, and other characteristics can distinguish one figure from others but in the array of post-Soviet leaders, Putin is a well-established brand identity.

We expect that the mention of Putin's endorsement will prompt respondents to use him as an available heuristic to respond to the question, and that they will most likely defer to his views about questions which do not interest them and about which they know little. We measure this interest in politics by a simple binary outcome, either "I am very interested in political matters" or "Sometimes I'm interested in these matters and sometimes not." Putin's support is expected to be higher among people who profess low political interest.

Expectation 5: People who endorse traditional patriarchal and heteronormative authority in the family will be more likely to support Vladimir Putin than those not endorsing such traditional values.

Putin's image as a man of action is one that is widespread and enduring. More than any other leadership image, the notion of Putin as a strongman is widely shared and accepted. Photographs of a bare-chested Putin fishing or hunting were widely circulated within Russia and beyond in a way that few other images achieve (Foxall, 2013). While these photographed performances of rugged masculinity are easily and widely satirized – and, over time, have given way to more images of the statesman in a suit – it is nevertheless the case that they have 'worked' to help boost a strongman image. Even political parties and leaders that one would expect to be hostile to Putin, such as conservative Republicans in the United States, accept that Putin was a tough leader. "At the center of Putin's macho aura is the celebration of Putin as a 'tough guy' who stands up to the Western 'liberal-fascist' enemies who are allegedly trying to weaken Russia at home and abroad. While masculinity has long been Putin's calling-card, ...that aspect of his leadership strategy became even more obvious in tandem with the escalation of the recent conflict in Ukraine" (Sperling, 2016, p. 14). Sperling (2015), Taylor (2018), Tempest (2016) and Wood (2016) all identify hyper-masculinity as one of the habits that make up the code of Putin. Though reports from Putin's earlier tenure in power suggest more regime support among women, though not necessarily significant when tested statistically (White & McAllister, 2003), there is variation among women and variation over time (Treisman, 2014).

Analyses of Putin's annual speeches over time show a trend towards more gender conservatism over time, particularly between his first two and two subsequent terms, though without explicitly endorsing a far-right position (Johnson et al. 2021).

Given this strong popular association between Putin and patriarchal masculinity, we expect that those who endorse traditional patriarchal

and heteronormative authority in the family are more likely to support a Putin endorsement. We measure traditional patriarchal values by a question that asked respondents to agree/disagree with the statement that "husbands should make the important decisions in a marriage." Agreement with this prompt is expected to align with more support for Putin.

In addition to testing these five expectations with appropriate specific measures, we add statistical controls that include socio-demographic variables (age, gender, education, wealth, Russian language use, general mood), the other four personality traits, media use (television as the main information source and trust in Russian media), general social trust and trust in other nationalities, and responses to a question about whether Russian interference is a problem or not in the respondent's country.

2. Data

The survey data examined in this paper were collected between December 2019 and March 2020 in six post-Soviet countries using a similar questionnaire and a comparable sampling methodology (nationally representative samples). The broader focus of the survey is on the geopolitical orientation of the populations in the former republics of the Soviet Union (and contested territories including de facto states); questions concentrated on preferred relations with Russia and the West for the respondent's home country. Central to these issues is the grand geopolitical strategy of Vladimir Putin for the post-Soviet space, and – within the bigger project – the focus in this paper is about the types of individuals who support Putin.

The sample sizes varied from country to country. Ukraine (not including the non-government controlled areas of the Donbas and the annexed peninsula of Crimea) has 2212 respondents, Moldova 1026, Kazakhstan 1201, Belarus 1210, Armenia 1183 and Georgia 1579, for a total of 8411 respondents. The Kyiv International Institute of Sociology (KIIS) implemented the survey in Ukraine and the Caucasus Research Resources Center (CRRC) in Tbilisi supervised the surveys in the other five countries using local partners. Using a standard form with over 100 similar questions and another 10 questions on key local topics, the interviewing was conducted on a face-to-face format using computer tablets that were pre-programmed. Interviews were in the local languages using a pre-interview translated text. The average time for the whole interview was 45 min.

Sampling of respondents followed best practices and was standardized across the sample countries. It involved a four-stage sampling design from oblasts to selection of urban-rural settlements and then random selection of sample points, and finally, random selection of houses/apartments and individuals within the household. The response rate varied from country to country and averaged 42% of people contacted for participation. In follow-up checks by supervisors, 10–20% of the respondents were re-contacted.

The survey questionnaire included two questions about Vladimir Putin. Among a battery of questions about trust in institutions and political figures, a direct question about trust in Putin was posed with a three-point scale ('no trust at all', 'a little trust' and 'a lot of trust'). While typical in surveys, questions like this on controversial figures or topics are often marked by evasive answers ('I cannot say' or 'I don't know'), by possible preference falsification, and even by a higher rate of refusal than for other questions. Frequently, the missingness is correlated with particular populations (e.g., ethnic or religious minorities) or regions. Discounting such patterns through a listwise or pairwise deletion can lead to mistaken conclusions about the survey results, especially if missing values constitute more than 10% of the total (Naylor & O'Loughlin, 2021). Imputation of answers using other survey responses can reduce the amount of missingness but a preferred methodology is to use an experimental design to elicit honest answers about the sensitive subject. Our paper relies on such an endorsement experiment.

3. How is Putin viewed in six post-Soviet countries?

The questions examined in this paper about Vladimir Putin were asked about two years before the most recent Russian invasion of Ukraine in February 2022. Thus, the values reported here are a kind of baseline value, though the war in the Donbas of eastern Ukraine was in its sixth year at the time of the survey and Crimea was annexed into Russia six years before.

The direct question about trust in Putin showed that 46% of the total sample reported 'no trust at all', 25.8% said 'trust a little', 18.5% 'a lot of trust', and with 8.7% giving a 'don't know' response and 1% refusing to answer. The varied distribution of these trust scores across the six countries in the study is striking, as seen in Fig. 1. The two countries in which the Russian military was involved in supporting local separatists (Donbas and Crimea in Ukraine; Abkhazia and South Ossetia in Georgia) show the lowest trust in Putin, with over 70% of these respondents reporting 'no trust at all'. The other end of the spectrum is anchored by Belarus and Kazakhstan, where over 70% of respondents said that they had a 'lot of trust' or 'a little trust' in Putin. Moldova and Armenia sit between these poles but people there generally lean more favorably to trusting Putin (combined 'lot of trust' and 'a little trust' total about 60%). As noted before, the difficulty with such a direct question is that it could be distorted by social desirability bias in which the respondent gives an answer that they think that the interviewer wishes to hear or by preference falsification due to fear of possible repercussions (e.g. Javeline, 1999; Kalinin, 2016; Kuran, 1995).

The indirect experimental design to measure support for Putin uses a widely-reported and discussed topic – that of oil exploitation in the Arctic Ocean – as a prompt and then compares answers for no endorsement of a decision to drill with an endorsement by President Vladimir Putin. The respondents were randomly assigned into two groups – a control and a treatment group – of about 2800 respondents each (the remainder of the respondents in the surveys were asked about an endorsement by Western oil companies and those answers are not examined here). The distribution of respondents was as follows: Ukraine 728 control and 739 treatment; Moldova 318 and 335; Georgia 495 and 579; Belarus 412 and 396; Kazakhstan 401 and 398; and Armenia 391 and 394.

Our policy cue is worded in the control version of the question as: "The Arctic sea ice is melting and oil deposits there are now accessible. These deposits will provide a large increase in world oil supplies at a time when other sources are declining. However, a significant risk of environmental pollution exists if companies drill for oil. Do you agree or disagree that oil companies should be allowed to drill?" A respondent could reply 'totally agree', 'rather agree', 'neither agree or disagree', 'rather disagree', or 'completely disagree'. A respondent could also refuse to answer or state that they 'don't know' (these latter two options are not read by the enumerator). The treatment version of the question is identical to the control text, but with an additional sentence: "President Putin of Russia strongly favors oil drilling." We code responses to the policy cue (both the treatment and control version) as numerical values 1–5 for support with 'completely disagree' and 'totally agree' anchoring the low and high ends of the scale, respectively.

In general, respondents across the post-Soviet space are against drilling in the Arctic Ocean, with nearly half of both control and treatment groups opposed (Fig. 2). About one in five respondents across all groups support drilling but this number is matched by a similar ratio of 'don't knows'. It is probable that many of these 'don't know' answers are genuinely uncertain about the risks of environmental damage from drilling in the Arctic Ocean or feel ambivalent about the balance between more oil coming into markets with expected lower energy costs versus possible environmental costs. Adding the 'don't knows' to the respondents who 'neither agree nor disagree' leaves about one-third of the respondents sitting on the fence on the issue.

Adding the 'strongly agree' and 'agree' numbers to calculate overall support for drilling, Fig. 3 shows differences between the national samples. Unlike the direct question about trust in Vladimir Putin, the large country variations are not as visible on the endorsement experimental answers. In Georgia, Moldova, and Ukraine, support for drilling is higher for the control group than for the endorsement of Putin. The Kazakhstan, Armenia, and Belarus samples are both generally more supportive of drilling and of Putin's endorsement.

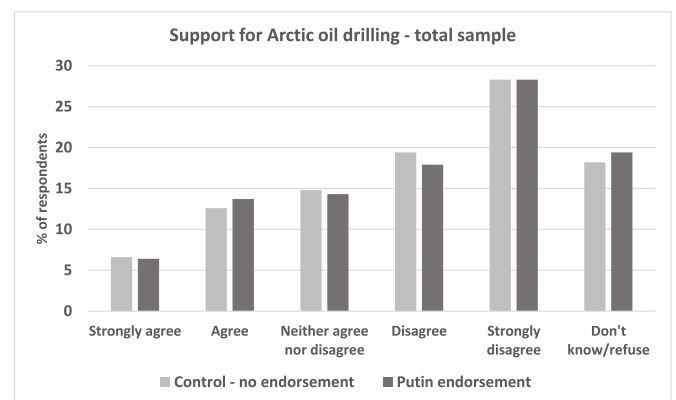


Fig. 2. Distribution of responses for experimental question on supporting Arctic Ocean oil drilling for the total sample -control and treatment group.

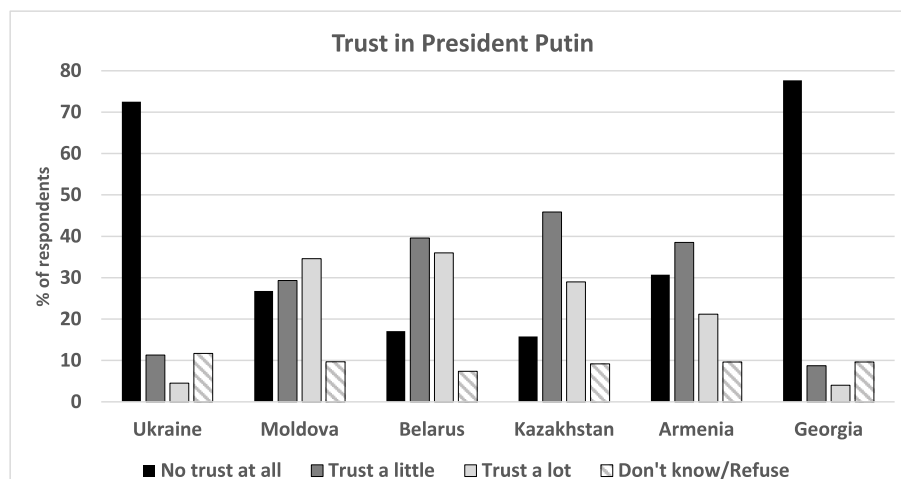


Fig. 1. Trust in President Vladimir Putin by country (unweighted values). National surveys by the authors conducted December 2019–March 2020.

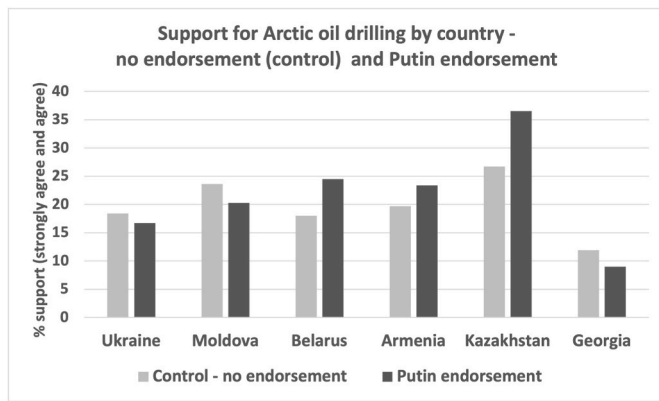


Fig. 3. Distribution of the support for oil drilling by endorsement (sum of strongly agree + agree) across six countries bordering Russia.

Respondents from Kazakhstan, a major fossil fuel producer, support drilling at a rate about 10% higher than other samples, regardless of whether there is no endorsement or if the endorser is Putin. Georgians are noticeably more skeptical of drilling than other countries. Endorsements have little effect in overall support (less than 10% either for or against) for Arctic Ocean drilling, though Putin's endorsement raises support slightly in Belarus, Kazakhstan, Armenia, and Moldova more than the control group (no endorsement). By testing our five expectations about what kinds of persons support Putin while controlling for other explanations based on personal demographic attributes, we evaluate his support in a variety of post-Soviet contexts.

4. The endorsement experiment

We use an endorsement experiment (Blair et al. 2013; Linke et al. 2018) to elicit honest responses about support for Vladimir Putin from the survey respondents. Half of the sample respondents analyzed are assigned to a treatment group where the policy cue is presented along with a reference to support for the policy from Putin. The treatment effect allows us to track how support for the policy cue changes depending on whether Putin was also said to support the policy. Other characteristics of the two groups of respondents are identical, as we show in the supplementary material, Table S2. Because the description of the policy is exactly the same in both the treatment and control group subpopulations which are matched, we can reliably attribute any changes in support for the policy to the endorsement from Putin.

Each of our expectations above is associated with a key independent variable. First, we use a personality question measuring whether respondents are closed-minded or generally open to new ideas, experiences, and inter-personal encounters. The variable is derived from two questions that asked whether respondents see themselves as a) "open to new experiences, complex", or b) "conventional, uncreative" (Gosling et al. 2003). Respondents could 'disagree strongly', 'disagree moderately', 'disagree a little', 'neither agree nor disagree', 'agree a little' or 'agree strongly'. We create a scale that ranks respondents for a. and the reverse of b. In our data, the scores for the respondents range from 0.5 to 10, with 27.4% scoring below 5, 49.9% between 5 and 7, and 22.7% above 7. We create a binary variable and code respondents equal to 1 (close-minded and not open to new or alternative viewpoints) if their openness score is below 5.

Our second independent variable measures whether a survey respondent holds conspiratorial views. We presented participants with the following statement: "The spread of certain viruses and/or diseases is the result of the deliberate, concealed efforts of a secret organization." Possible responses include 'strongly disagree', 'disagree', 'neither disagree or agree', 'agree a little', and 'strongly agree'. We again create a binary variable and code respondents as conspiratorial (value of 1) if

they stated that they 'agree' or 'strongly agree' with the statement about diseases.

The third independent variable measures whether or not a respondent trusts scientific expertise. For such an evaluation, we asked about "scientists who warn about climate change" and respondents were asked "how much do you generally trust?" such experts. The responses 'no trust at all' and 'trust a little' are coded as 1 because they express skepticism about the validity about climate science conclusions (the value of 0 is 'trust a lot').

As a measurement of interest in civil society and official politics, our question asked, "which of the following statements best applies to you with respect to political topics?" Reply options include "I am very interested in political matters", "sometimes I'm interested in these matters and sometimes not", and "these topics do not interest me". We code respondents equal to 1 (that is, uninterested in politics) if they chose the last response. Finally, as an indicator of holding generally traditional patriarchal values, we asked respondents about an everyday scenario. Respondents who 'fully agree' or 'agree that "In a family, the husband should always make the important decisions"' were coded as 1 for holding paternalistic views by agreeing with this statement.

Our Table S1 'null model' results show that excluding these control variables from the models (leaving only the five key predictors) does not fundamentally change our conclusions (see Fig. S2, panel c). Following convention for this research design, the variables we use in our models are rescaled from 0 to 1. Along with all other survey data variables, descriptive statistics for the policy cue are presented in Table 1. In our models, we include weights for individual respondents based on each country's sample that are designed to reflect the distribution of key demographic categories in them (age, gender, region, and urban-rural locations).

A key issue in this and related studies in the former Soviet Union is that of 'missingness' in the data. Proceeding with the standard statistical options of pairwise or listwise deletion of 'don't know' responses can lead to biased estimates and incorrect conclusions. This is especially the case if the missing data are correlated with some key predictor, such as those who hold conspiratorial views, or those who agree with the Putin endorsement. A quick glance at Figs. 2 and 3 shows that about 15–20% of the sample give 'don't know' answers for the question; refusals are few, less than 1–2%. Imputation of these missing data follows best practices in these circumstances where missing values are unlikely to be randomly distributed across the samples.

We impute missing values for the dependent variable and one key

Table 1
Dependent, independent, and control variable descriptive statistics.

	Mean	Std Dev	Max	Min
Policy cue outcome	2.435	1.344	5	1
Putin treatment	0.34	0.474	1	0
Closed-minded	0.274	0.446	1	0
Conspiratorial	0.462	0.499	1	0
No trust in experts	0.561	0.496	1	0
No interest in politics	0.334	0.472	1	0
Hold traditional values	0.454	0.497	1	0
Age	49.068	17.804	99	18
Gender	0.606	0.489	1	0
Higher education	0.289	0.454	1	0
Poor	0.428	0.495	1	0
Poor mood	0.189	0.391	1	0
Russian language at home	0.335	0.472	1	0
No trust in others	0.176	0.381	1	0
Low general trust	0.745	0.436	1	0
Trust Russian media	0.104	0.305	1	0
News from TV	0.622	0.485	1	0
Russian interference a problem	0.327	0.469	1	0
Emotional	4.64	1.289	7	1
Extraverted	4.188	0.918	7	1
Agreeable	5.088	1.216	7	1
Conscientious	5.754	1.074	7	1

independent variable in our dataset. First, we introduced NA (not available) values for the policy cue support variable in 1051 observations (18.8% of the total) where respondents refused to answer, or respondents who answered 'don't know.' We then used a random forest imputation for these dependent variable NAs. We chose the 'missForest' routine in R (Stekhoven, 2016), which does not assume missingness at random (MAR) or that the variable has a multivariate normal distribution. Our method has benefits over alternative approaches to missing data imputation, including Amelia (Honaker et al., 2019) and MICE (Van Buren, 2021). Separate analysis of the data showed that almost all variables have a MAR pattern and in general, it is appropriate to impute such missing observations in this manner.

Fig. S1 in the supplemental information presents a comparison of the distribution of the original values to the imputed values. We also impute 480 missing observations for the closed-minded independent variable question that corresponds with Expectation 1. Normalized mean squared error of the two imputed values to the original values (for the observations that were not NA) is 0.0119, which can be interpreted as a low error rate of 1.19%. The mean values in Table 1 include the imputed responses.

5. Methods and results

In our analysis of the endorsement experiment data, the level of policy cue support is a continuous variable, modeled using an ordinary least squares (OLS) regression (Blair et al., 2013). We estimate policy support P_{ij} for respondent i in primary sampling unit j ($n = 518$) as a function of hierarchical random intercepts (β_0, J_{0j}), individual control variables ($X_{i1} \dots n$) and an interaction term effect β_{MT} for an interaction term between an independent variable of interest (M) and the treatment status (T) of the respondent, which designates whether that person received the policy cue question with the Putin endorsement. The model can be represented:

$$P_{ij} = \beta_{0i} + J_{0j} + \beta_{MT} M_{ij} \times T_{ij} + \beta_{i1} \dots n X_{i1} \dots n + \beta_{2Cij} + \varepsilon_{ij}$$

The β_{MT} estimate quantifies latent support for Putin in the population who expressed the key independent variable personality trait. To account for unobserved political, economic and social differences between countries, we include country fixed effects, C . We do not report β_2 effects. Remaining stochastic error is captured in ε_{ij} .

To facilitate the interpretation of our results, we present the combined linear predictor – or “total treatment effects” (Blair et al., 2013, p. 38) – graphically using general linear hypothesis methods (the 'ghlt' routine in the 'multcomp' R package; Bretz et al., 2010). We report total treatment effect as a percentage with 95% confidence intervals in Fig. 4. We report raw coefficient values, standard errors, and model diagnostics separately in Supplemental Information Table S1.

Our main results are presented in Fig. 4 below. Results reported in

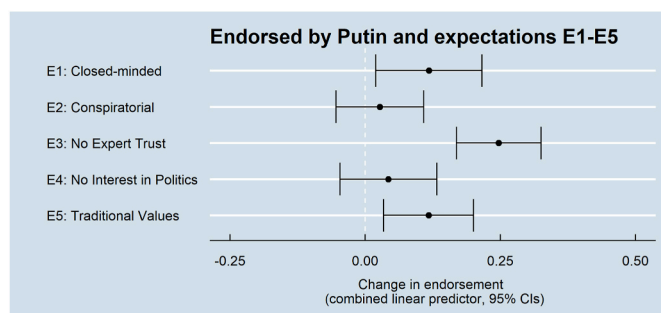


Fig. 4. Endorsement experiment results estimating support for Putin (x-axis) among survey respondents with expectations based on five predictors (y-axis). The graph present results for models include all survey weights and demographic controls.

this figure includes survey weights and demographic controls. In the full sample of survey respondents, we find support for expectation 1 (close-minded people are more likely to support Vladimir Putin), expectation 3 (people who do not trust scientific expertise are more likely to support Putin), and expectation 5 (traditionalists, as expressed by patriarchal views, are more likely to support Putin). We find no evidence validating expectation 2 (people who are more conspiratorial are more likely to support Putin) or expectation 4 (people who are uninterested in politics are more likely to support Putin).

Controlling for alternative explanations of support for Putin, we find that people who hold traditional values are 11.73% more likely to support Putin than other respondents (expectation 5). We find an even stronger relationship when it comes those distrusting scientific expertise (expectation 3). Respondents with 'no expert trust' are 24.69% more likely to support Putin than individuals in the sample who trust in science as measured by the prompt on climate change. Those with close-minded personalities are roughly 11.77% more likely to support Putin.

These findings underscore some important arguments. First, Putin has a strongly populist appeal to many people. Populism is an anti-elite discourse and is defined by anti-expert and anti-intellectual dispositions (Mudde & Kaltwasser, 2017). Some argue it is an affective aesthetic style, a pose as an ordinary person standing up to 'know-it-all' elites (Kurylo, 2022). Second, the findings reveal the significant policy steering power of populist leaders to anti-intellectual and science-skeptical segments of populations on climate change. Putin, as noted above, was previously a climate change skeptic and prone to optimism bias in considering its potential impacts on Russia. While such habits of cognition have not fully disappeared from his thinking, his acknowledgement that climate change holds considerable negative environmental implications for Russia is an important shift in his attitude, brought on by undeniable material environmental experience with wildfires in both European Russia and in Siberia, as well as soaring temperatures in permafrost and ice-covered regions (Gustafson, 2021). Similarly, Russian public opinion about climate change has shifted (Tykkynen and Tykkynen, 2018). Our experiment indicates that Putin endorses a classical extractive attitude toward the earth's resources, something that resonates with many populists skeptical of elites like climate scientists and their discourses about foreboding climate change. Our results suggest, however, that were he to do the opposite, to endorse an environmental protectionist policy position, he could potentially sway an anti-intellectual climate skeptical segment of the population. This is a hypothetical for future research.

Supplemental Information Table S1 presents the full results of the models that produce Fig. 4 and the effects we report for the main independent variables measuring our expectations. Note that several of the control variables (e.g. gender) are statistically significant, helping to explain support for the Arctic Ocean drilling policy cue. Absent an interaction with the treatment status of the respondents – this captures the prompt for Putin *also* supporting the policy – that we use for our main independent variables of interest, these do not quantify a level of support for Putin. However, their significance indicates that we capture some additional variation in the dependent variable by including them. In the end, and as Supplemental Information Fig. S2 shows, including these covariates does not fundamentally alter our findings. Trust in Russian media is positively associated with support for the Arctic Ocean drilling, an expected finding since television programs broadcast from Russia into the 'Near Abroad' countries strongly reflect Kremlin policies and views in a reinforcing information bubble. Opposition to Arctic Ocean drilling is shown by the significant negative values for women, those who have a higher level of education, people who think that Russian interference is a problem for their own country, and those who have a low level of general trust (measured by agreement with the statement that “you cannot be too careful” in dealing with other people).

In Supplemental Information Fig. S2, we first present a set of models with no controls, no weights, and neither weights nor demographic controls (a 'null model'), respectively. The additional models do not

differ from the main one shown in Fig. 4; the same predictors of open/closed-mindedness, distrust in scientific expertise, and traditionalist views are significant in every model version. The other expectations are not supported in any of the model versions.

In Fig. 5, we present a replication of Fig. 4 results separately for the Armenia, Belarus, Georgia, Kazakhstan, Moldova, and Ukraine populations (panels a–f). In these models, we include country-fixed effects so comparative country influences are thereby controlled. While there are some key differences between our main results and the individual country findings, there is considerable similarity – in four of six countries – when it comes to the expectation about scientific expertise (expectation 3). Interpreting Fig. 5, one must remember that the sample size drops, which leads to wider confidence intervals around each predictor's point estimate. It is not a surprise that there might be fewer significant estimates as a result. The comparisons for each country that we highlight here rely mainly on the most robust tests, which are estimated using the model with all control variables and with survey weights.

Fig. 5a for Armenia shows strong support for the “close-mindedness” (expectation 1) and “no expert trust” finding (expectation 3). There, people without open-minded perspectives are approximately 35% more likely to support Putin. Those with no trust in scientific experts are

roughly 50% more likely to support Putin than others. Interestingly, our main “traditional values” (expectation 5) result in Fig. 4 does not maintain in the analysis of the Armenia sample.

In Belarus also, the results (Fig. 5b) similarly show support for expectation 3 (no expert trust), but the effect is much smaller than in Armenia, with roughly 20% greater support for Putin among those who are skeptical of experts. With a smaller sample size, neither the fourth nor fifth expectation has strong support, but Belarus officially also has a uniquely close relationship with Putin, which could have led to a higher level of baseline (or latent) support that an endorsement would not prompt as effectively. Indeed, as shown in Fig. 1, Belarus is the country with the greatest share of the population who trust Putin ‘a lot’.

In Georgia, none of the five expectations hold (Fig. 5c). In Kazakhstan, support for Putin is higher among science skeptics as well (expectation 3); compared with others, with these respondents roughly 35% more likely to support Putin (see Fig. 5d). The expectation 3 test (no expert trust) results for Moldova (30% more likely) in Fig. 5e show a relationship consistent with the other countries and the pooled main results. We also found the same relationship for those who hold traditional values; those Moldovans are about 40% more likely to support Putin.

In Kazakhstan and Ukraine, we observe two significant relationships

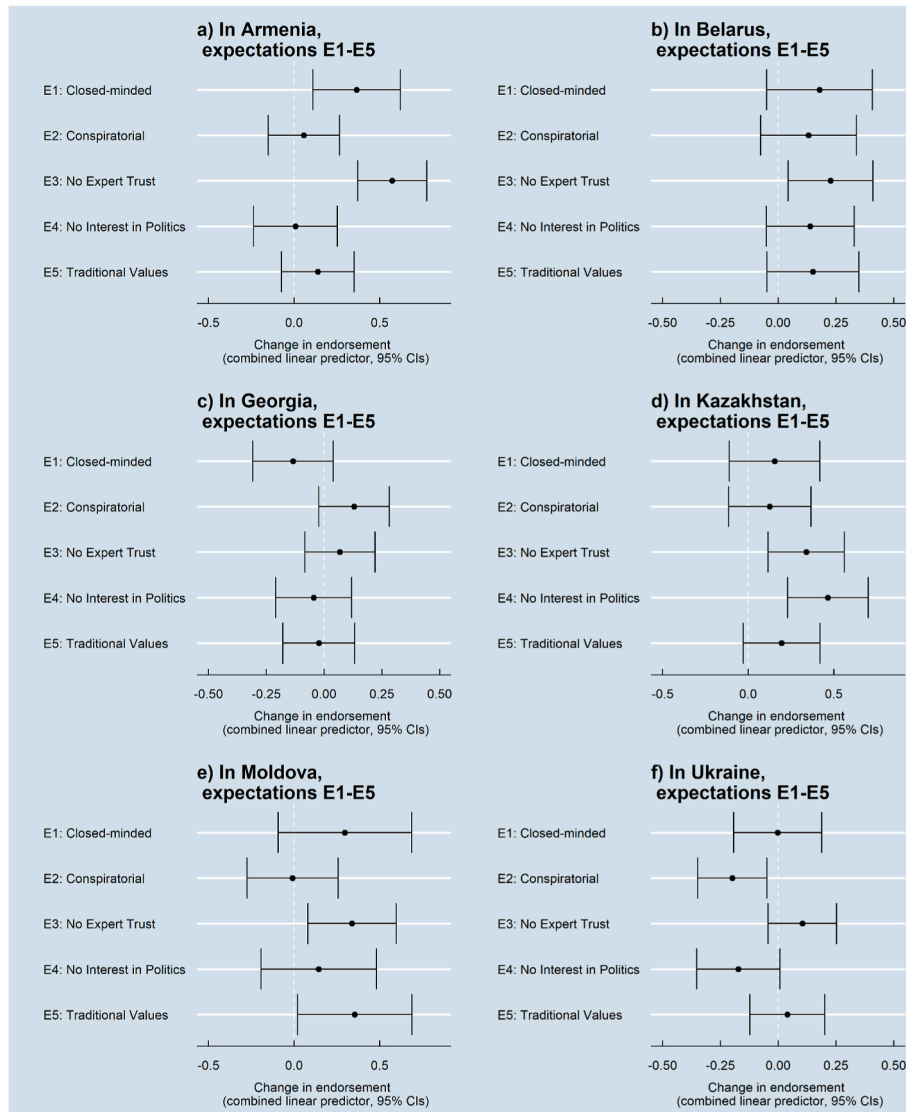


Fig. 5. Main model for the sub-samples for six countries bordering Russia.

that do not appear in our analysis of the full sample. In Kazakhstan, people who have no interest in politics (expectation 4) are roughly 40% more likely to support Putin than others (see Fig. 5d). This support for this expectation is unique to the Kazakhstan survey respondents. Another difference for Ukraine in our analysis of individual countries is that conspiratorial people (expectation 2) are *less* likely to support Putin than those who do not hold these beliefs. Here, the people with conspiratorial beliefs may be skeptical about Russian geopolitical ambitions in the wake of 2014 annexation of Crimea and the ongoing Russian support for separatism in the Donbas.

Despite the evidence that Vladimir Putin has higher trust and support overall in Belarus, Armenia, and Kazakhstan than in Ukraine, Georgia, and Moldova, the respondents in all countries generally 'behave' in a consistent manner with respect to endorsing Putin's positions. In other words, we do not see big differences between the types of people who support or oppose Putin between the six countries based on their individual characteristics. Regardless of country location, science skeptics align more with Putin while other expectations around respondents' level of interest in politics and conspiratorial thinkers rarely hold (e.g., expectation 4 in only Kazakhstan) or point in an unanticipated direction (e.g., expectation 2 effects were negative in Ukraine, the only country with a significant estimate). In Armenia the close-minded personality types have the strongest support for Putin, perhaps carrying the main Fig. 4 findings.

6. Conclusions

In this analysis of how Vladimir Putin is viewed beyond the borders of Russia among its neighbors, we find a weak effect, on both the positive and negative sides, of his endorsement of a policy cue about Arctic oil drilling. The data for the indirect question as a measure of Putin's support showed a dramatic difference with the direct question about trust for Putin. Large country-to-country differences in the answers to the direct question disappeared when the Putin support measure was indirectly calculated in the endorsement experiment. One possible explanation for this difference is that the policy cue was too salient – that is, the question about Arctic Ocean drilling asked about a subject on which respondents already had well-formed or politically motivated opinions, and endorsements for one side or the other hardly matter. In this light, the Putin factor is swamped by an overriding sensibility on the environmental matter.

We find mixed support for our expectations about what motivates people to support the positions of Vladimir Putin. We found a significant relationship with 'close-minded' people using the BIG 5 personality test in the pooled six-country sample, but not with those who hold conspiratorial views or are uninterested in politics. Support for the hypotheses on the effects of skepticism about expert scientific perspectives was the strongest among our expectations and held in most individual country sub-samples. As expected, science skeptics demonstrated more support for Putin and people with traditional beliefs also tended to endorse his positions.

The role of personality traits in determining political and geopolitical views is gaining increasing attention as such individual characteristics have been identified as potentially important in determining political choices (Caprara & Zimbardo, 2004; Caprara et al., 2006) especially in a context of authoritarianism (Greene & Robertson, 2017). The success of right-wing political movements in the United States and other Western democracies has spurred interest in the types of personalities that are attracted to them (Aichholzer & Zandonella, 2016; Bakker et al. 2015). But, as argued by Greene and Robertson (2017), conspiratorial and personality factors may not have direct causal effects on political choices but might be mediated by other intervening variables, such as the choice of information media which in turn leads to a reinforcing of information bubbles or so-called echo chambers.

Vladimir Putin dominates the current post-Soviet political environment in Russia and its neighbors and is properly the focus of much

scholarly attention to his views and their reception among publics at home and abroad. But as we have shown in this paper, to parse out the factors that motivate people to support or oppose such political figures or other controversial choices such as territorial adjustments or the nature of governance, we need to go beyond the usual socio-economic explanations. To incorporate elements of survey respondent personalities, a more complicated survey design, including extensive questions about deeply-held attitudes, is essential. These data are not usually available in the data archives and will require specific and expensive implementation of targeted public opinion surveys in societies that are often neglected in Western social science research.

Declaration of competing interest

The authors declare no conflicts of interest.

Data availability

Data will be made available on request.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.polgeo.2023.103014>.

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