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RESEARCH ARTICLE

Rightwing populist attitudes and public support for climate policies in Western Europe: Widening the scope using the European Social Survey

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Abstract

In Western Europe, rightwing populist parties and their supporters frequently deny the realities of climate change and oppose climate policies. Meanwhile, public opinion research has tied ideological orientations associated with rightwing populism to climate change denial/skepticism and climate policy opposition. Yet, comprehensive studies assessing the relative importance of various rightwing populist orientations across national contexts are lacking. Using European Social Survey data (Round 8) from 15 Western European countries, we systematically investigate the relationships between a large set of orientations related to rightwing populism and public views about climate change. The results show that nationalism and nativism, that is, orientations associated with the thick ideology of rightwing populism, appear to be comparably strong and consistent predictors, especially regarding opposition to climate change mitigation policies. However, the relative importance of different orientations varies across Western European countries, and depend on whether the focus is on policy attitudes or climate change beliefs. Researchers studying single countries and/or specific attitudinal outcomes should therefore be cautious when generalizing about these relationships cross-nationally.

Introduction

According to the IPCC, the global community will not achieve the emissions-reduction targets outlined in the Paris Agreement without swiftly enacting comprehensive and ambitious climate policies [1]. Meanwhile, in democratic societies, public opinion is decisive for public policymaking [2]. Indeed, previous research has demonstrated that climate change mitigation policies rely on public support [3, 4], as changes in public opinion has been shown to inform and guide climate policymakers [5]. However, climate reforms such as renewable energy programs or taxes on fossil fuels often meet widespread public opposition [6–8]. A key explanation for this opposition is that policy preferences are politically motivated, as conservatives and rightwing supporters are more likely to oppose climate policies compared to liberals and

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leftwing supporters [9]. Studies in a European setting have confirmed this supposition, yet this association is primarily observed in Western European countries, whereas political ideology appears to play a lesser role for climate policy preferences in Eastern European countries [10]. While left-right political ideology has consistently been linked to climate policy preferences in Western Europe, public opinion research has only recently highlighted the role of alternative ideological dimensions such as those associated with rightwing populism.

Rightwing populism has disrupted politics in many Western European countries. The rise of rightwing populism in recent decades is often characterized as a backlash to the palpable change towards progressive and liberal values in Western Europe, characterized by cosmopolitanism, multiculturalism, environmentalism, gender equality and LGBTQ rights [11]. Climate change, and in particular Western societies' attempts to address it, appears to provoke a strong reaction among rightwing populists, often viewed as an integral part of a larger liberal and cosmopolitan elite agenda [12]. For instance, in the European Parliament, rightwing populist politicians consistently oppose and vote against laws and policies aiming to mitigate climate change [13].

A growing body of research underscores the impact of various rightwing populist sentiments on public views about climate change. Several studies, especially in Western European and Anglophone settings, have found that climate change denial/skepticism and opposition to climate policy are related to a range of orientations associated with rightwing populism, such as nativism [14, 15], nationalism [16], populism [17, 18], authoritarianism [19], as well as antiegalitarian and exclusionary attitudes [20]. However, much of previous research has been conducted in single countries, often using non-representative samples such as web panels and university student samples, focusing on single or a limited set of ideological orientations associated with rightwing populism. Hence, there is an absence of studies examining the relative impact of multiple ideological orientations associated with rightwing populism on climate policy support as well as their applicability across diverse national contexts.

Given the multifaceted nature of rightwing populist ideological orientations, it is imperative to analyze these dimensions simultaneously rather than in isolation. By examining them in tandem, it is possible to control for potential confounding effects and better discern the unique contribution of each dimension vis-à-vis public opinion on climate policy. Here, we aim to adopt such a holistic approach, to ensure a more robust and nuanced understanding of the relationships between the underlying ideological tenets of rightwing populism and public opinion on climate change. While many previous studies have focused on climate change denial/skepticism, outcomes directly tied to climate action, like climate policy support, have received comparatively less attention. This distinction becomes particularly relevant given that beliefs about climate change are not necessarily translated into support for climate policy and that the strength of beliefs-support relationship varies considerably across countries [21–24]. The limited scope in terms of the number of rightwing populist orientations included in previous studies, combined with the variability in study settings and sample representativeness in much of existing research, underscores the need for cross-national studies using nationally representative samples.

In this study we examine a wide range of orientations commonly associated with rightwing populism in the public opinion literature on climate change. Our main objective is to investigate (i) the extent to which the relationships between different rightwing orientations and climate policy attitudes are generalizable across Western Europe, and (ii) whether some orientations are stronger and more consistent predictors of climate policy attitudes. To examine these relationships in Western Europe, we use 2016/2017 data from the European Social Survey (ESS), a large high-quality international survey with representative samples for 15 Western European countries. Using the ESS enables us to capture a wider range of orientations associated with rightwing populist ideology, while studying them across a larger number of

countries, compared to much of previous research. However, while our study draws from existing survey data to capture a comparatively large number of rightwing populist orientations, our dataset might not possess the same depth or precision as some previous research that focused on a more limited set of dimensions and corresponding measurement instruments. Given that most rightwing populist orientations have not been studied simultaneously, we thus aim to make an important contribution to the literature on how the ideological tenets of rightwing populism can undermine critical climate policymaking in Western Europe. In doing so, we demonstrate that rightwing populist orientations in general are negatively related to support for climate change mitigation policy, but that there are considerable differences regarding the importance of specific orientations, and their generalizability across Western European national contexts.

Previous research and theoretical underpinnings

In Western Europe, rightwing populist parties have emerged as a distinct political party family with increasing electoral support [11], distinguished not only by anti-establishment and anti-immigrant party positions but also by issue stances and rhetoric downplaying the dangers of climate change and the importance of climate policies [13, 25–27]. In the European Parliament, rightwing populist incumbents consistently vote in opposition towards climate and energy-transition policies [13], and their influence has been shown to significantly shape climate change policymaking [28, 29].

According to Lockwood [12], rightwing populist opposition to the climate change agenda appears to be rooted in a more general rejection of liberal and cosmopolitan elites, where skeptical views about climate change piggyback on suspicion and antipathy towards the broader political elite project of globalization and centralized politics. Hence, although challenging climate change is not the main priority for rightwing populists, it undoubtedly has an important symbolic meaning, as climate change has become "the cosmopolitan issue par excellence" [12]. In the following, we will review the literature on rightwing populism and public opinion on climate change, with particular focus on orientations associated with the so-called "thin" and "thick" ideological dimensions (cf. [30]), and their relationship to climate policy attitudes.

"Thin" ideology and climate policy support

While the literature on populism has a decades-long history, it is still a contested concept in terms of its content and meaning, as many conceptual and measurement issues remain unresolved [31, 32]. Due to its contested and ambiguous nature, a reasonable strategy is to adopt a minimalist definition focusing on ubiquitous elements that are, irrespective of the context, found in most populist discourses and rhetoric [33]. According to Rooduijn [31], "populism thus consists of at least two sub-dimensions: people-centrism and anti-elitism". The peoplecentrism dimension focuses on a lack of external political efficacy, that is, the perception that while ordinary people should have the ultimate say in politics, politicians are unresponsive to the will of the people. The anti-elitism dimension focuses on political distrust and dissatisfaction with democracy, epitomizing the perception that people have been politically marginalized by an untrustworthy and corrupt political elite. This distinction is also evident in the definition provided by Mudde [34], which states that populism "considers society to be ultimately separated into two homogeneous and antagonistic groups, 'the pure people' versus the 'corrupt elite,' and which argues that politics should be an expression of the volonté générale (general will) of the people". However, due to its limited application to concrete political problems, populism is often referred to as a "thin" ideology that is often combined with a "thick" or "host" ideology with clearer implications for political decision making [30, 35].

Some conceptualizations and measurements of populist attitudes focus exclusively on external political efficacy [32] while others have a more narrow focus on public views about politicians' trustworthiness, honesty, and competence [36]. However, indicators of external political efficacy and political trust have been shown to be closely associated with each other as well as with other populist dimensions, such as a Manichean worldview that perceives the world in terms of a fundamental conflict between good and evil [37, 38]. Moreover, research on voting behavior, predominantly in Western European countries, show that lack of external political efficacy and political distrust are both linked to voting for rightwing populist parties [39, 40], suggesting that people-centrism and anti-elitism constitute key ideological orientations among rightwing populist party supporters in Western Europe.

According to the logic of populism as a "thin" ideology, rightwing populists are typically hostile towards political initiatives to mitigate climate change because they view them as the result of political elite projects corrupted by special interests and nefarious "climate experts" rather than the people's will [12]. Climate change skepticism and opposition to climate action among rightwing populists thus appear entrenched in anti-elitist and populist concerns as well as rejection of the political agenda of cosmopolitanism and global politics. It is therefore not surprising that rightwing populists reject the realities of climate change or oppose (especially international) efforts to address it.

Indeed, previous public opinion research on climate change has found links between populist attitudes and climate policy preferences. In a study using non-probability survey data from a web panel the UK, Huber [17] find that populist attitudes are associated with climate change skepticism and weaker support for environmental protection, even when controlling for traditional political ideology. In another study based on web panel data using survey experiments in the US, Huber et al. [18] similarly find evidence of a negative relationship between populism and support for government climate action as well as willingness to pay (e.g., higher taxes) to reduce emissions. While the authors find that populist attitudes undermine public support for various policy dimensions, they only find this relationship among respondents holding rightwing party sympathies, suggesting that rightwing populism constitutes a variety of populism particularly detrimental to climate action. Additional studies using cross-national European data have shown that people who hold anti-elitist sentiments, e.g., low trust in politicians and the political system, are less likely to support climate policies such as taxes on fossil fuels and subsidies on renewable energy [23, 24]. Finally, in a study based on a probability sample from a Dutch web panel, Meijers et al. (2023) [41] show that anti-elitist sentiments towards climate science and politicians mediate the effect of populist attitudes on climate policy evaluations. Based on the above, we therefore expect orientations associated with the "thin" ideology of rightwing populism to be negatively related to public support for climate policy.

"Thick" ideology and climate policy support

According to Mudde [34], the "thin" ideology of rightwing populism is typically combined with a "thick" or "host" ideology constituted by nativism and/or nationalism. Nativism tend to be defined as an ideology that prioritizes the interests and well-being of native-born of a given country over those of immigrants, typically manifested as xenophobic attitudes or demand for restrictions on immigration [42]. While rightwing populist parties in Western Europe all tend to adopt a general anti-immigrant (i.e., nativist) platform [43], studies on party politics and political manifestos demonstrate that these parties have become particularly characterized by (neo)nationalism—conceptualized as a boundary-maintenance project emphasizing the importance of sustaining a national way of life and a self-governing nation [44, 45]. This subset of nationalism centers on the idea that globalization and multiculturalism pose a threat to the

economy, culture, and sovereignty of the nation state, typically manifested as opposition to EU-enlargement or negative perceptions regarding the consequences of immigration for the culture or economy [46]. Whereas rightwing populist parties in Western Europe have become increasingly characterized by a (neo)nationalist agenda, public opinion data has shown that this type of nationalist attitudes are closely linked to voting for rightwing populist parties [16, 44, 47].

While the literature on rightwing populism tends to emphasize the coexistence of populism and nativism/nationalism [42], most empirical studies conflate the two or study them separately [31, 48]. It is, however, theoretically and analytically meaningful to make a clear distinction between populism and for instance nationalism [49]. In disentangling the *rightwing populism-climate change nexus*, Lockwood [12] argues that focusing on the "thick" ideology of rightwing populism appear particularly fruitful, as it fills the "thin" ideology of rightwing populism with substance more clearly linked to issues of climate change. Indeed, the consequences of climate change—such as the need for global cooperation and international climate treaties that potentially undermine national sovereignty, or the moral imperative to accommodate climate migrants—provide powerful impetus for rightwing populists to reject the climate change agenda and to wave off calls for political action on climate change [12, 16].

In public opinion, nationalist sentiments often manifest as a defense of national sovereignty and protectionist measures aimed at safeguarding national culture and economy from perceived threats like international entities such as the EU or the potential adverse effects of immigration [34]. Previous research has linked nationalist and nativist attitudes to public opinion on climate change. In a study using a representative dataset from 23 European countries, Kulin et al. [16] find that attitudes consistent with nationalist ideology are associated with both climate change skepticism and opposition to increasing taxes on fossil fuels, and that these relationships are particularly salient in Western European countries. Several studies have also found negative relationships between environmentalism or climate policy support and a variety of related measures, such as national collective narcissism [50, 51] or national ingroup identification (labelled nationalism) and mistrust for people of other nations [52].

A few studies have linked anti-immigrant attitudes, which according to Mudde [34] is a core dimension of nativism, to climate change denial/skepticism. In a study using representative data from Norway, Krange et al. [14] find that negative attitudes towards immigrants and asylum seekers are associated with climate change skepticism. Similarly, Jylhä and Hellmer [20] use a student sample from Sweden and find that exclusionism (which in their study include opposition to multiculturalism) is linked to climate change denial/skepticism. Finally, Fisher et al. [15] use data from the European Social Survey and find that negative attitudes towards immigrants from poorer countries outside Europe are associated with more skeptic beliefs, and less concern, about climate change. Although the mechanisms tying nativism (e.g., anti-immigrant sentiments) to for instance climate change denial are not entirely clear, the fact that the most dire consequences of climate change are imposed on people in the global south could make nativists, especially in a Western European setting, more prone to downplay the dangers of climate change or completely reject its reality. To summarize, we therefore expect orientations associated with the "thick" ideology of rightwing populism to be negatively related to climate policy support.

Anti-egalitarian, exclusionist and authoritarian orientations

Some studies on rightwing populism and public opinion on climate change also associate additional socio-political orientations to rightwing populism, such as authoritarian, exclusionary and anti-egalitarian orientations. Although the theoretical linkages remain somewhat elusive,

several psychological studies investigate the role of ideologically charged personality traits commonly associated with rightwing populism, such as authoritarianism. For instance, Stanley et al. [53], find that authoritarian orientations—conceptualized as a preference for submission to authority—are related to climate skepticism. In their study of climate change denial, Jylhä and Hellmer [20] theoretically link both authoritarianism as well as exclusionary and anti-egalitarian attitudes (opposition to feminism, homosexuality and multiculturalism) to rightwing populism, but only find a relationship between the latter and climate change denial (for a similar study, see [54]). However, given that nativism is a core dimension of the "thick" ideology of right-wing populism, it is problematic to conflate opposition to multiculturalism with attitudes towards gender and sexuality, especially as it remains uncertain which factor primarily drives the results. Moreover, while these personality traits and orientations are frequently observed among rightwing populists, it is unclear if they are constitutive of its core ideology or if they simply serve as underlying psychological tendencies associated with broader conservative political orientations (cf. [55]). With regard exclusionary and anti-egalitarian attitudes (cf. [20]), it also makes sense to distinguish between exclusionary (e.g., patriarchal and heteronormative) orientations aimed at certain groups on the one hand, and anti-egalitarian orientations that oppose the equal treatment of all people on the other.

In Table 1, we provide a summary of key studies (discussed above) associating various orientations to rightwing populism and investigate their relationship to public opinion on climate change. In Fig 1, we also visualize all the above-mentioned orientations associated with rightwing populist ideology in a theoretical model.

Data and methods

To analyze the relationships between various orientations associated with rightwing populism and public support for climate policy, we use data from the 8th round of the *European Social Survey* (ESS) administered in the years 2016/2017 [56]. The ESS is distinguished by its rigorous methodological approach in capturing Europeans' attitudes and beliefs, by employing thorough pretesting of questions for clarity and reliability. With a commitment to cross-national equivalence and rigorous sampling methods, the ESS consistently delivers representative and high-quality data, by many considered a gold standard in cross-national survey research.

In our analyses, we use linear multiple regressions (OLS) and ESS data consisting of representative samples of the adult population in 15 Western European countries (abbreviation in

Table 1. Studies focusing on rightwing populism and public opinion on climate change.

Dimension	Author(s)	Data, Country/Region
Nativism	Krange et al. (2019) Fisher et al. (2022)	TNS Gallup web panel, Norway ESS, Europe
Nationalism	Kulin et al. (2021)	ESS, Europe
People-centrism	Huber (2020) Huber et al. (2020) Meijers et al. (2023)	British election study, UK Ipsos web panel, US LISS web panel, the Netherlands
Anti-elitism	Huber (2020) Huber et al. (2020) Fairbrother et al. (2019) Kulin & Johansson Sevä (2021) Meijers et al. (2023)	British election study, UK Ipsos web panel, US ESS, Europe ESS, Europe LISS web panel, the Netherlands
Exclusionism/Anti-egalitarianism	Jylhä & Hellmer (2020) Remsö & Renström (2023)	Student sample, Sweden Online survey, Sweden
Authoritarianism	Stanley & Wilson (2017) Jylhä & Hellmer (2020)	Student sample, New Zeeland Student sample, Sweden

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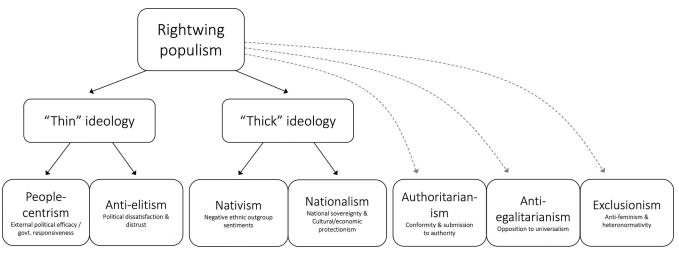


Fig 1. Theoretical model.

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parenthesis): Austria (AT), Belgium (BE), Finland (FI), France (FR), Germany (DE), Iceland (IS), Ireland (IE), Italy (IT), Netherlands (NL), Norway (NO), Portugal (PT), Spain (ES), Sweden (SE), Switzerland (CH), United Kingdom (GB). For more details about the ESS data, sampling methods and questionnaire development, see the European Social Survey (2018). The ESS also contains additional countries (Eastern European, Russia, Israel), yet we focus on Western European countries since it is mainly in these countries where rightwing populist parties have gained recent successes [11]. Although most previous studies on rightwing populist orientations and public views about climate change have been conducted in single Western European countries, those that include for instance Eastern European countries demonstrate that such orientations are less influential in these countries compared to in the West (see e.g., [15, 16]).

Ethics statement

The ESS data used in this study is publicly available and anonymized. Their surveys are conducted through face-to-face interviews, where participants are informed that their participation is voluntary and that they withdraw their participation at any time until the data is anonymized and published. Written informed consent to participate in the study was given by all participants. In accordance with the ESS ERIC Statutes (Article 23.3), the ESS ERIC subscribes to the Declaration on Professional Ethics of the International Statistical Institute. For more detailed information on research ethics in the ESS surveys, see the ESS website (https://www.europeansocialsurvey.org/about/research-ethics).

Dependent variables

To measure public preferences regarding climate change mitigation policies, we use three items from the ESS dataset focusing on taxes on fossil fuels, subsidies on renewable energy, and bans on inefficient household appliances. All three items ask respondents "To what extent are you in favour or against the following policies in [country] to reduce climate change?" for the following three items: "Increasing taxes on fossil fuels, such as oil, gas and coal", "Using public money to subsidise renewable energy such as wind and solar power", and "A law banning the sale of the least energy efficient household appliances". Answer alternatives range between 1–5, where 1 = "Strongly in favour"; 2 = "Somewhat in favour"; 3 = "Neither in favour"

nor against"; 4 = "Somewhat against"; 5 = "Strongly against". To measure the overall tendency of individuals to favor climate policies, we use factor scores based on a principal component analysis (PCA) of these three items (reverse coded). The PCA showed that a single factor constitutes a relatively good representation of the data (Eigenvalue = 1.51, explained variance = 50.3%) and that each of the three manifest indicators load strongly on this factor (>0.69). The factor scores are standardized (mean = 0, standard deviation = 1) and represent individuals' scores on the climate policy support factor, with higher values indicating higher levels of support.

In a secondary analysis, we investigate whether the effects of orientations associated with rightwing populism remain consistent when alternating the dependent variable concerning public opinion on climate change. Considering that much of past research on various dimensions of rightwing populism, including anti-egalitarian and exclusionist attitudes as well as authoritarianism, has centered on climate change beliefs, in particular climate change skepticism or denial (e.g., [14, 20, 53]), we also construct a measurement of climate change beliefs using three items that capture people's views along the three dimensions trend, attribution and impact (see [23, 57]). To measure the trend dimension of climate change beliefs, we used an item asking participants: "Do you think the earth's climate is changing?" They could choose from the following options: 1 = "Definitely not changing", 2 = "Probably not changing", 3 = "Probably changing", and 4 = "Definitely changing". To measure beliefs about the causes of climate change (attribution), we presented the question, "Do you think climate change is caused by natural processes, human activity, or both?" The response choices were: 1 = "Entirely by natural processes", 2 = "Mostly by natural processes", 3 = "About equally by natural processes and human activity", 4 = "Mostly by human activity", and 5 = "Entirely by human processes". For gauging beliefs about the impacts of climate change, we utilized an item asking, "How good or bad do you think the impacts of climate change will be across the world?" The response scale ranged from 0 = "Extremely bad" to 10 = "Extremely good", which we then reverse coded to correspond to the scales of the other items (higher values = stronger beliefs). In the ESS, respondents who answered "Definitely not changing" on the trend skepticism item were not asked the subsequent questions regarding attribution and impact skepticism, and have been excluded from the analyses. However, these respondents amount to less than 1% of the sample, as merely 290 out of 28032 respondents answered "Definitely not changing". Consistent with prior studies that utilized these items to measure a single dimension of climate change beliefs/skepticism, a principal component analysis (PCA) identifies a single latent factor (Eigenvalue = 1.55) with strong factor loadings (>0.7) for all three observed items. Similar to the policy support measure detailed above, we use factor scores where higher values are indicative of believing in harmful and anthropogenic climate change.

Independent variables

Our main independent variables are constituted by various measures of different orientations associated with rightwing populism, which we will briefly describe below. All dimensions and sub-dimensions, as well as specific item wordings and response scales, can be found in $\underline{S1}$ Table. For all multi-item measures, we used PCA (results presented in parentheses) to retrieve factor scores, which are standardized (mean = 0, standard deviation = 1) and represent individuals' scores on each of the orientations associated with rightwing populism. In the analyses, we use z-scores for single item measures in order to facilitate easy comparisons of effects across independent variables.

To measure attitudes consistent with the "thin" ideology of rightwing populism along the two populist dimensions *people-centrism* and *anti-elitism* (cf. [31]), we use items tapping

external political efficacy (people-centrism) as well as political distrust and dissatisfaction (anti-elitism). External efficacy was measured using two items asking respondents whether they think that ordinary people have a say in what the government does and whether the political system allows people to have an influence on politics (Eigenvalue = 1.65, factor loadings>0.9, explained variance = 82.5%). To measure political distrust and dissatisfaction, we use two items asking respondents how much they personally trust politicians and parliament and two items that ask respondents about their satisfaction with government and democracy (Eigenvalue = 2.91, factor loadings>0.84, explained variance = 72.7%). Additionally, as an overall measure of the "thin" ideology of rightwing populism (people-centrism *and* anti-elitism), we use factor scores retrieved from a PCA analysis of all six items (Eigenvalue = 3.65, factor loadings = 0.70–0.84, explained variance = 60.8%).

To measure attitudes consistent with the "thick" ideology of rightwing populism along the two dimensions *nativism* and *nationalism* [34], we use the following items: Nativist attitudes was measured using two items asking respondents to what extent they think that their country should allow people to come and live here if they are either (1) of another race or ethnic group, or (2) from poorer countries outside Europe. We then obtained factor scores using PCA (Eigenvalue = 1.80, factor loadings>0.94, explained variance = 90.0%). Nationalist attitudes were measured using four items tapping public preferences for national sovereignty, cultural and economic protectionism, as well as national identity and attachment. As a measure of preferences for national sovereignty, we use an item asking respondents whether European unification should go further or whether it has gone too far. To measure cultural and economic protectionism, we use two items asking respondents whether their country's cultural life is generally undermined or enriched and whether it is generally bad or good for the national economy that people come to live there from other countries. To measure national identity and attachment (or, alternatively, anti-globalism), we use two items asking about respondents' emotional attachment to their country, relative to their attachment to Europe. We then obtained factor scores based on a PCA analysis of all four items (Eigenvalue = 2.14, factor loadings = 0.57-0.82, explained variance = 53.5%). Additionally, as an overall measure of the "thick" ideology of rightwing populism (nativism and nationalism), we use factor scores based on all six variables (Eigenvalue = 3.16, factor loadings = 0.46-0.83, explained variance = 52.7%).

Authoritarianism is often conceptualized as a preferred social order based on social conformity at the expense of personal autonomy [58] or as a preference for submission to authority [53]. To measure authoritarianism, we therefore use an item from the Schwartz' Human Values Scale in the ESS asking respondents whether they think it is important to obey authorities and conform to rules. At its essence, egalitarianism is an expression of a preference for a social order where everyone is entitled to the same rights and opportunities in life. To measure antiegalitarianism, we use an item from the Schwartz' Human Values scale asking respondents whether they think it is important that everyone should be treated equally and have equal opportunities in life. This item was coded so that higher values indicate anti-egalitarian views. To facilitate comparisons of the effects regarding various orientations, both these single item measures were standardized (mean = 0, standard deviation = 1). Whereas some previous studies use a composite measure to capture anti-egalitarian and exclusionist attitudes in relation to both gender, sexuality and multiculturalism, we include a measure of exclusionism focusing exclusively on gender and sexuality, namely, attitudes towards feminism/patriarchalism and heteronormativity (Eigenvalue = 1.36, factor loadings>0.82, explained variance = 67.9%). Given our inclusion of nativism (that measures anti-immigrant attitudes separately) and a separate item measuring anti-egalitarianism, this strategy will enable distinguishing between these different constructs and examine their respective influence on climate policy preferences.

In the analyses, we control for political left-right ideology by including an item measuring subjective placement on the political left-right continuum. Political left-right (liberal-conservative) ideology arguably is one of the most commonly used measures of political orientations in survey research on public views about climate change [10, 59]. Previous research has found that the left-right political continuum in Western Europe, despite its varying interpretations, consistently encapsulates the central economic and cultural conflicts in different countries, making it a useful tool for cross-national comparative analysis [60]. Indeed, studies have found cross-national differences in terms of the meanings people ascribe to the left-right continuum, although in a European context, these differences are most accentuated between Western and Eastern European countries [61, 62]. To measure political ideology, we include an item asking respondents to place themselves on a scale ranging between 0 and 10, where 0 = "Left" and 10 ="Right". To facilitate comparisons with orientations associated with rightwing populism, the measure was standardized (mean = 0, standard deviation = 1). Finally, we also include the following socio-demographic control variables: gender (0 = "woman", 1 = "man") age (years), education (years), and income (deciles). In \$2 Table, we present descriptive statistics for all variables in the analyses (except socio-demographic controls).

Results

To explore the relationship between orientations associated with rightwing populism and public support for climate policies, we employ within-country multiple regressions. Throughout the results section, our emphasis lies on two primary aspects: (1) the relative magnitude of these relationships within specific countries, and (2) their cross-national consistency. In other words, we focus on whether there are cross-nationally generalizable patterns in the relative importance of various subdimensions (nationalism, nativism, anti-elitism, and people-centrism) as well as the broader dimensions capturing the "thin" and "thick" ideologies of rightwing populism (cf. [34]). Given that prior research on rightwing populism has addressed various facets of climate public opinion, including policy attitudes [16, 18] and beliefs such as denial/skepticism [17, 20], we also contrast the results from the analyses on climate policy preferences with those from analyses on climate change beliefs.

In Table 2, the findings for attitudes consistent with the "thin" ideology of rightwing populism show that the effects of people-centrism on climate policy support appear to be varied across countries, where the negative effect (b-value) is comparably large in a few countries such as Iceland (-0.165), Ireland (-0.129), United Kingdom (-0.109), while weaker and nonsignificant in the majority of countries. Anti-elitism offers a similar pattern where we find statistically significant effects only in a few countries. For instance, in Belgium (-0.140), Ireland (0.138), and the Netherlands (-0.137), higher scores in anti-elitism are associated with decreased support for climate policies. In most other countries, the effects of anti-elitism are weak and not statistically significant. Hence, while people who score high on people-centrism and anti-elitism are generally more likely to oppose climate policies in some countries, these effects are not necessarily generalizable across Western Europe.

Focusing on attitudes consistent with the "thick" ideology of rightwing populism, the results in Table 2 show that higher scores on nativism are notably linked with decreased support for climate policies in countries such as Germany (-0.194), Norway (-0.150), Italy (-0.136), and France (-0.119), while weaker and/or non-significant effects are found in most other countries. Turning to nationalism, the results demonstrate a statistically significant negative association with climate policy support in all countries but one (Austria), and the coefficient is particularly large in Spain, Finland, Germany, France, United Kingdom, Iceland, Portugal, and Sweden (-0.143 to -0.251). This trend across all but one country indicates that

Table 2. Within-country OLS regressions with climate policy support (factor) as the dependent variable.

	AT	BE	СН	DE	ES	FI	FR	GB	IE	IS	II	NL	ON	PT	SE
Gender: Man	0.020	-0.019	-0.066	-0.124	0.006	-0.164	-0.045	0.053	-0.043	-0.165*	-0.045	-0.160**	-0.178***	0.059	-0.179
	(0.049)	(0.047)	(0.054)	(0.038)	(0.061)	(0.040)	(0.046)	(0.051)	(0.053)	(0.078)	(0.063)	(0.052)	(0.047)	(690.0)	(0.052)
Age (years)	0.001	-0.002	0.003^*	-0.002	-0.000	0.001	-0.000	0.003^*	0.003	0.000	0.002	0.001	0.002	0.005	-0.002
	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
Education (years)	0.017	0.034***	$\boldsymbol{0.020}^*$	0.011	0.006	0.015**	0.014	0.011	0.041	0.004	0.003	0.019^*	0.028***	0.036***	0.010
	(0.000)	(0.007)	(0.008)	(0.006)	(0.007)	(0.006)	(0.007)	(0.007)	(0.000)	(0.010)	(0.008)	(0.008)	(0.007)	(0.000)	(0.008)
Income (deciles)	0.018	0.033**	0.008	-0.009	0.025*	-0.005	0.009	0.042***	0.052***	0.017	0.026	0.002	0.008	0.035	0.013
	(0.010)		(0.011)	(0.007)	(0.012)	(0.008)	(0.000)	(0.010)	(0.011)	(0.017)	(0.014)	(0.010)		(0.014)	(0.010)
Left-right ideology	-0.066*	-0.049	-0.235***	-0.017	-0.082	-0.106***	-0.017	-0.165***	-0.052	-0.194	0.055	-0.130***	-0.178***	0.005	-0.128
	(0.029)	(0.026)	(0.031)	(0.023)	(0.033)		(0.022)	(0.032)	(0.029)	(0.043)		(0.032)		(0.031)	(0.025)
Nativism	-0.090	-0.053	0.011	-0.194	-0.051	-0.077*	-0.119***	-0.048	-0.086*	0.016	-0.136**	-0.037	-0.150***	-0.038	-0.054
	(0.038)	(0.034)	(0.041)	(0.030)		(0.032)	(0.036)	(0.040)	(0.038)	(0.062)	(0.047)	(0.040)	(0.037)	(0.053)	(0.045)
Nationalism	-0.033	-0.117	-0.097*	-0.153***	-0.186***	-0.247***	-0.143***	-0.251***	-0.109**	-0.230^{**}	-0.125^{**}	-0.134*	-0.175***	-0.207***	-0.159^{**}
	(0.040)	(0.042)		(0.033)		(0.037)	(0.037)	(0.041)	(0.040)	(0.078)	(0.048)	(0.053)	(0.041)	(0.057)	(0.049)
People-centrism	-0.040	0.007	-0.104**	-0.009	0.048	-0.021	-0.060	-0.109**	-0.129**	-0.165**	-0.022	-0.095	-0.091	0.022	-0.043
	(0.038)	(0.037)		(0.030)	(0.045)	(0.032)	(0.037)	(0.042)	(0.040)	(0.063)	(0.063)	(0.044)	(0.040)	(0.050)	(0.043)
Anti-elitism	-0.014	-0.140***	-0.081	-0.058	-0.078	-0.028	-0.043	-0.014	-0.138***	-0.024	-0.007	-0.137**	-0.090	-0.053	-0.074
	(0.034)	(0.036)	(0.042)	(0.028)	(0.040)	(0.029)	(0.037)	(0.038)	(0.040)	(0.058)	(0.045)	(0.048)	(0.042)	(0.048)	(0.043)
Exclusionism	-0.098 *	-0.052	-0.090	-0.072	-0.140*	-0.154	-0.067	-0.101	-0.063	-0.125	-0.184	0.000	-0.090	-0.215**	-0.096
	(0.040)	(0.045)		(0.039)	(0.065)	(0.043)	(0.043)	(0.053)	(0.049)	(0.117)	(0.055)	(0.058)	(0.053)	(0.072)	(0.068)
Anti-egalitarianism	-0.106***	-0.103	-0.109***	-0.0579**	-0.064	-0.043*	-0.071	-0.072	-0.088	-0.026	-0.034	-0.119***	-0.107***	-0.073*	-0.086
	(0.025)	(0.028)	(0.027)	(0.019)	(0.039)	(0.021)	(0.023)	(0.025)	(0.027)	(0.042)	(0.034)	(0.033)	(0.023)	(0.035)	(0.030)
Authoritarianism	-0.033	0.043	0.014	-0.025	-0.023	0.027	0.001	0.020	0.069**	0.050	0.053	-0.038	0.068**	0.053	-0.016
	(0.027)	(0.026)	(0.028)	(0.019)	(0.030)	(0.021)	(0.022)	(0.025)	(0.027)	(0.039)	(0.037)	(0.029)	(0.026)	(0.036)	(0.027)
Intercept	-0.074	-0.581	-0.221	0.174	-0.292	0.003	-0.247	-0.721	-1.178***	-0.396	-0.121	-0.187	-0.438***	-0.876***	0.122
	(0.151)	(0.134)	(0.145)	(0.105)	(0.169)	(0.114)	(0.135)	(0.138)	(0.175)	(0.228)	(0.174)	(0.149)	(0.126)	(0.175)	(0.148)
N	1251	1573	1038	2326	970	1687	1621	1356	1473	621	921	1251	1316	915	1199
adj. R ²	0.083	0.116	0.166	0.133	0.087	0.168	0.104	0.171	0.149	0.110	0.091	0.120	0.251	0.130	0.144

Notes: Cell entries are regression coefficients (b-value) from within-country OLS regressions with climate policy support (factor) as the dependent variable. Statistical significance levels:

Bold entries denote statistically significant effects with p<0.05. Standard errors in parentheses. The scales for all independent variables of interest are standardized, either as factor scores (PCA) or zscores (single items), with mean = 0, standard deviation = 1.

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^{*} p < 0.05

^{**} p < 0.01

^{***} p < 0.001

nationalistic sentiments is a relatively strong and consistent predictor of support for climate policies in Western Europe.

With regard to the other orientations associated with rightwing populism, we find that higher scores on exclusionism are linked with reduced support for climate policies in countries such as Portugal (-0.215), Italy (-0.184), Finland (-0.154), and Spain (-0.140). In the majority of countries, however, we only find weak and statistically non-significant effects. Anti-egalitarianism on the other hand, consistently shows a negative association with climate policy support in many countries, implying that those less supportive of equality are generally more likely to oppose climate policies. It should however be noted that these effects (<-0.119) are generally weaker compared to those of, for instance, nationalism. Finally, we only find statistically significant and relatively weak effects of authoritarianism in the two countries Ireland (0.069) and Norway (0.068). However, these findings are notable, as higher scores on authoritarianism are associated with increased (rather than decreased) support for climate policies.

Based on the results thus far, attitudes consistent with the "thick" rather than the "thin" ideology of rightwing populism, and especially nationalism, appear to be particularly strong and consistent predictors of climate policy preferences across Western European countries. Further analyses that decompose the dependent variable into attitudes towards specific policies demonstrate that while most rightwing populist indicators are more strongly linked to the tax question, the general pattern is one where orientations associated with the thick ideology (nationalism and nativism) are stronger and more consistent predictors (see S3 Table). Overall, these results are noteworthy, not least in the light of previous studies showing that rightwing populist voters above all hold attitudes consistent with nationalist and nativist ideology [44, 47]. In our data, we find similar results, namely, that among all indicators associated with rightwing populism studied here, rightwing populist voters are first and foremost characterized by their nationalist and nativist sentiments (see S1–S3 Figs).

Considering the control variables, a right-leaning political ideology is associated with weaker support for climate policies in several countries, such as Switzerland, Finland, United Kingdom, Iceland, Netherlands, Norway, and Sweden. However, the effect is weaker in some countries and statistically non-significant in six countries. The other control variables—gender, age, education and income—all have statistically significant effects in the expected directions, although only in a limited number of countries.

While previous studies have indeed highlighted the relationships between individual indicators of both the "thin" and "thick" ideologies of rightwing populism and public opinion on climate policy [14, 16–18], few have adopted an approach that simultaneously combines these dimensions into two distinct measures and analyzes their respective influence on climate policy support. In Figs 2 and 3, we visually present the predicted values and confidence intervals (95%) of climate policy support as a function of either the "thin" or "thick" ideology of rightwing populism, adjusted for a range of control variables in country-specific multiple regressions (cf. Table 2).

As depicted in Fig 2, attitudes consistent with the "thin" ideology of rightwing populism are clearly related to climate policy support in several countries, largely mirroring the results in Table 2. However, when comparing the results in Fig 2 with those in Fig 3, it becomes evident that attitudes consistent with the "thick" ideology of rightwing populism generally exerts a stronger and more consistent influence on climate policy support. Three notable exceptions are Switzerland, Ireland and the Netherlands, where the slopes for "thin" ideology are steeper compared to the slopes for "thick" ideology, although some of these differences are barely statistically significant. For attitudes consistent with the "thick" ideology of rightwing populism, the slopes are markedly steeper in several countries, such as Germany, Finland, Italy, Portugal, France, Spain, United Kingdom; countries where the slopes for "thin" ideology are

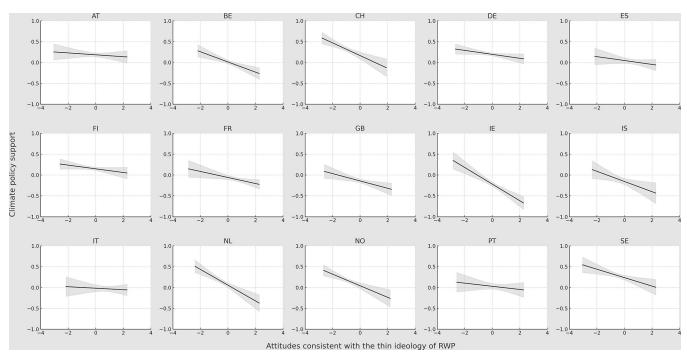


Fig 2. Attitudes consistent with the thin ideology of rightwing populism and climate policy support. Predicted values and 95% CI's for "Climate policy support" at different values on "Attitudes consistent with the thin ideology of rightwing populism" (RWP), while holding all other control variables (gender, age, education, income, political trust, left-right self-placement, authoritarianism, anti-egalitarianism, and exclusionism) at their mean values. In the analyses, both indicators for thin and thick ideology were included simultaneously in the models, to control for one while estimating the effect of the other.

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comparatively less steep or even flat. This visual representation thus underscores the overarching narrative from our tabulated results, emphasizing the role of the "thick" ideological dimensions (nationalism and nativism) in shaping public support for climate policy in Western Europe.

Given that previous studies on several of the rightwing populist orientations, such as antiegalitarian and exclusionist attitudes and authoritarianism, have predominantly focused on climate change beliefs such as denial [20, 53], we conduct an alternative analysis with climate change beliefs as the dependent variable (see S4 Table). In comparing Table 2 with the results for climate change beliefs, it is evident that while nativism and nationalism influence both policy support and beliefs in many countries, the effects are generally weaker and the pattern is less consistent when focusing on climate change beliefs, especially regarding nationalism. Nativism, on the other hand, appears to be associated with both weaker support for climate policy and climate change skepticism (cf. [20, 54]), while the effects of nationalism are reversed to our expectations in a few countries (with less skepticism among nationalists). Moreover, all the effects of anti-elitism on climate change beliefs are reversed to our expectations, as they are generally associated with less skepticism, thereby contradicting the results in previous studies that have linked populism (including anti-elitism) to climate change skepticism [17].

In contrast to the analysis of climate policy preferences, the effects of exclusionism and anti-egalitarianism are especially pronounced and more cross-nationally consistent with regard to climate change beliefs. Specifically, the results show that people who hold anti-egalitarian values and exclusionary attitudes in relation to gender and sexuality are more likely to display skepticism about the realities of climate change, thus confirming the results in previous studies on climate change denial [20]. Considering that we found generally stronger effects of anti-egalitarianism and exclusionism on climate change beliefs, and across a broader set of

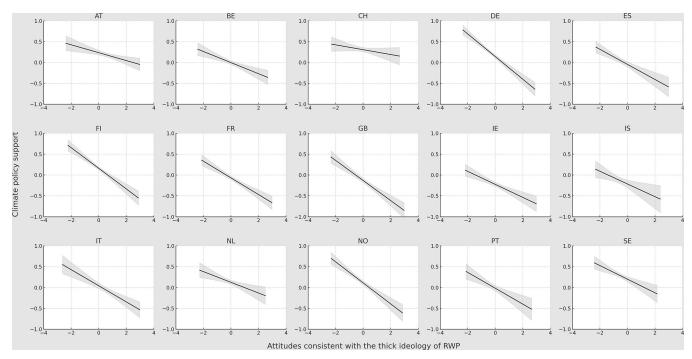


Fig 3. Attitudes consistent with the thick ideology of rightwing populism and climate policy support. Predicted values and 95% CI's for "Climate policy support" at different values on "Attitudes consistent with the thick ideology of rightwing populism" (RWP), while holding all other control variables (gender, age, education, income, political trust, left-right self-placement, authoritarianism, anti-egalitarianism, and exclusionism) at their mean values. In the analyses, both indicators for thin and thick ideology were included simultaneously in the models, to control for one while estimating the effect of the other.

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countries than on climate policy support, the findings suggest that the outcome in focus (be it beliefs or policy support) has important implications for the relationship between rightwing populist orientations and public opinion on climate change. Hence, while our results show that various orientations associated with rightwing populism shape climate-related beliefs and attitudes, exclusionary and anti-egalitarian orientations generally play an important role in driving skepticism about climate change, whereas nativism and nationalism appear to play a more crucial role in explaining public opposition climate policy.

Discussion

In this study, we contribute to the literature on the relationship between political ideology and public opinion on climate change by examining a large set of orientations commonly associated with rightwing populism and their role in shaping climate policy preferences. Our findings underscore that nationalist attitudes exhibit a notably strong and cross-nationally consistent relationship with public opposition to climate policies, not least compared to other rightwing populist orientations. These findings suggest that people who value national sovereignty and cultural/economic protectionism are particularly likely to oppose climate policies, thus corroborating previous studies showing that nationalist attitudes predict public opposition to fossil fuel taxes in many Western European countries [16]. Considering that we also found substantial effects of nativist (anti-immigrant) attitudes in several countries, our results suggest that attitudes consistent with the "thick" ideology of rightwing populism appear to be particularly important predictors of climate policy preferences in much of Western Europe.

Regarding the effects of attitudes consistent with the "thin" ideology of rightwing populism, the results were more mixed, as we found strong effects in some countries while non-existing

or weak effects in several countries. For instance, our results from the UK only partly corroborate the finding by [17] of a relationship between populist attitudes and support for environmental protection, as we only found an independent and moderate-sized effect of people-centrism (and not anti-elitism) on climate policy preferences. Hence, respondents who think that ordinary people do not have a say in politics and that politicians are not responsive to the will of the people are also more likely to oppose climate policies. However, the effect of nationalism in the UK, as in many other countries, was considerably greater in comparison.

Although less consistent compared to the effects of nationalist attitudes, the results for nativism are in line with those from previous studies that have found a link between general anti-immigrant sentiments and for instance climate change denial/skepticism [14, 20]. Given that the effect of anti-immigrant attitudes often coincides with a substantive effect of nationalist attitudes, we also ensure that the effects of anti-immigrant sentiments are not due to nationalist concerns but rather nativist traits such as xenophobia and prejudice, and vice versa, which is a strength compared to previous studies. However, even though we found a relatively consistent relationship between nationalist attitudes and public opposition to climate policies in all but one country (Austria), we still found notable cross-national differences in effects sizes. This was also the case with nativist attitudes (in countries where such effects were observed). For other orientations, especially anti-elitism and people-centrism, the effects were even more varied: substantial in some countries and weak or non-significant in others. These variations underscore the importance of the national context for the relationship between rightwing populist orientations and climate policy preferences.

While attitudes consistent with the "thick" ideology of rightwing populism appear to be generally stronger and more consistent predictors of climate policy attitudes, our results show that exclusionary and anti-egalitarian orientations are more consequential for climate change beliefs, albeit with considerable cross-national variation. The theoretical linkages between exclusionism or anti-egalitarianism and climate change views are, however, somewhat elusive, as it is not entirely clear why for instance anti-feminism or anti-egalitarianism should lead to climate change skepticism or climate policy opposition. Nevertheless, the fact that we find stronger and more consistent effects of these variables on climate change beliefs (compared to policy attitudes) highlights how the role of different orientations associated with rightwing populism in shaping public opinion on climate change depend on the focused outcome.

Regarding the control variable left-right political ideology we generally found the expected effects, as rightwing ideology is associated with less support for climate policies in many Western European countries. However, we also observed substantial cross-national differences, as we found weak and statistically non-significant effects of left-right political ideology in six countries. Hence, when including orientations specifically tied to rightwing populism in the models, the effects of left-right political ideology appear less consistent across Western European countries compared to previous studies [10]. However, considering the broad conceptualization of rightwing populist orientations in our study (including, e.g., anti-egalitarianism), these results are perhaps not surprising as self-placement on the left-right political spectrum is very likely explained partly by these orientations. This would explain why political polarization on climate policy along the mainstream left-right political dimension is less salient in several countries.

Our study has several important implications. Given that rightwing populist voters above all hold nativist and nationalist sentiments, overcoming public resistance to climate policy to a great extent require that the tension between these core ideological tenets of rightwing populism and climate action is somehow resolved. Hence, a pressing challenge in both public discourse and political debates on climate change appear to lie in countering nationalist and nativist narratives, either by promoting cosmopolitan ethics [63] or by defusing or reshaping these discourses to endorse a progressive climate change agenda, all while avoiding the pitfalls

of the emerging eco-fascist rhetoric typically emerging from nationalist and nativist narratives [64]. Our results also have important implications for scholars of rightwing populism and public opinion on climate change, as we demonstrate that various orientations associated with rightwing populism differ in their importance depending on (1) whether the focus is on climate change beliefs or climate policy preferences, and (2) the country context. It is therefore important to be cognizant of the context-specific nature of the interplay between rightwing populist ideological orientations and public views about climate change. Hence, our results are a call for caution, as they suggest that researchers should be particularly wary of drawing generalizing conclusions about the influence of different rightwing populist orientations based on single country studies focusing on a specific type of climate change belief or attitudinal outcome.

Limitations and future research

A potential limitation of this study is the omission of additional right-wing populist orientations, beyond the one's examined here. One such orientation is social dominance orientation (SDO), which favors group hierarchies and the dominance of some groups over others, which (it has been argued) may also extend to views about the right of humans to dominate the environment and the climate. However, while SDO has been theoretically linked to rightwing populism and empirically studied in relation to climate change denial/skepticism, most studies find weak or no effects of SDO [19, 20]. Nevertheless, we would like to stress that while we do not claim to have incorporated all relevant orientations associated with rightwing populism in our analyses, we have attempted to include as many rightwing populist orientations as possible given the currently available cross-national data. Considering that we have been able to include a substantial number of indicators for orientations closely associated with both the "thin" and "thick" ideology of rightwing populism, we believe our study speak to the complexities and nuances in the relationship between rightwing populism and public opinion about climate change. Moreover, considering that the ESS data (Round 8) is now 7-8 years old, our study might not reflect current conditions, where rightwing populist parties with a nationalist/nativist rhetoric have not only cemented their positions in mainstream politics in many Western European countries but also strengthened their profile as the main antagonists to the climate change agenda. A crucial task for future studies, therefore, is to investigate (once newer crossnational data becomes available) how climate policy attitudes are affected by the continuing development of rightwing populism in Western Europe.

Another limitation concerns the specific operationalization of various orientations associated with rightwing populism. On the one hand, using representative data from the European Social Survey is a notable strength of our study, providing an expansive view of orientations associated with right-wing populist ideology, surpassing the scope of many previous studies. On the other hand, while the ESS allows us to explore multiple dimensions or orientations simultaneously, a potential limitation arises in the operationalization of some of these orientations, since the number of available indicators per construct is limited. Moreover, using measurement instruments based on a larger number of manifest indicators than those available in the ESS would also allow for the testing of measurement equivalence across countries, which is currently not possible.

For instance, using a more comprehensive and validated measurement instrument to capture populist attitudes, including a Manichean worldview [39], might have yielded different results. At the same time, since most dimensions of populism tend to be highly correlated [37, 38] and that "it has still not been shown convincingly that the populist attitude really differs from other attitudinal constructs like 'political cynicism' or 'external efficacy'" [31], we believe our results provide important insights about the association between the "thin" ideology of

populism and climate policy preferences across a large number of Western European countries. Nevertheless, future studies should strive to include as many exhaustive and established measurement instruments as possible regarding rightwing populist orientations while also taking into consideration the interrelationship between different populist dimensions (which has not been considered here, but see [65]). Hence, this study should primarily be considered as a first attempt at widening the scope, in the study of rightwing populism and public opinion on climate change.

It could be argued that another potential limitation is that the measures of climate policy preferences in the ESS only refer to certain policies—such as fossil fuel taxes or subsidies for renewable energy—and that the inclusion of preferences in relation to other policies might have produced different results regarding the effects of nationalist and populist attitudes. In particular, future studies should focus on policy preferences in relation to other measures that can be expected to have a substantial impact on emissions reductions, such as bans on internal combustion engine vehicles and just transition policies aiming to compensate workers during the transition or loss and damage in the disproportionally affected global south (cf. [66]). Future research on rightwing populism and climate policy support should therefore aim to include a wider set of climate policy preferences, if and when such cross-national data becomes available. Nevertheless, we believe our results contribute to the understanding about the prerequisites for achieving decarbonization and sustainable societies, since carbon pricing and incentivizing transition to sustainable energy production and usage arguably constitute key policies to meet emissions reduction targets [67].

Finally, previous research shows that both populist and nationalist sentiments are characterizing features of Western European rightwing populist parties and their voters [40, 44], several public opinion studies demonstrate that such attitudes are not necessarily exclusive to rightwing populist voters [68, 69]. In fact, the electoral successes of rightwing populist parties to a great extent rely on mobilizing already existing attitudes and sentiments in the population [33, 70]. While previous research has not been able to tie the size of rightwing populist parties across national contexts to public views about climate change [71], research on elite framing suggest that rightwing populist parties could exert a broader influence on the political discourse and debate through their issue positions and rhetoric [72, 73]. Given the established influence of political elite framing and rhetoric on public views about climate change [74], rightwing populist parties and politicians very likely provide cues and articulate opposition to climate policies based on their core ideology [28], which then fuel such sentiments in the broader public, even beyond their narrow share of voters. Future research should aim to disentangle these effects across rightwing populist voters and non-voters, as well as devoting special attention to exploring the potential role of elite framing and rhetoric in tying populist and nationalist discourses to climate change issues.

Conclusion

Our results align with the argument by Lockwood [12] that focusing on rightwing populism as an ideological phenomenon is particularly fruitful in order to understand and respond to "the challenge to climate science and policy posed by the rise of RWP". Given the pivotal importance of public support for climate policies in progressing towards net-zero emissions, the attitudes aligned with rightwing populism, particularly those rooted in nationalism and nativism, present significant barriers to achieving sustainable societies in Western Europe. The recent electoral surge of Western European rightwing populist parties and the fact that the term "populism" masks the primary nature of these parties as being predominantly nativist and/or nationalist [75] underscores the magnitude of this task. Not least considering the upcoming

2024 European Parliament election, rightwing populist parties and politicians in Western Europe present potentially formidable challenges as they are expected to advance their positions, and thus very likely also their obstructionist climate action agenda. Meeting these challenges is vital, as our research indicates that the "thick" ideology of rightwing populism, encompassing nativism and nationalism, holds notable sway over public opinion on climate policy. Hence, our findings not only highlight the role of rightwing populism as an obstacle to progressive climate policymaking in Western Europe and the EU [76] but also shed light on why it emerges as a consequential sociopolitical counterforce to climate action.

Supporting information

S1 Fig. Rightwing populist indicators (sub-dimensions of "thin" and "thick" ideology), by party family voting. To construct the voting variable, we used an item in the ESS asking respondents which party they voted for in the most recent national election. We then coded each party into party families, following Mair and Mudde [77]. (TIFF)

S2 Fig. Rightwing populist indicators (other orientations), by party family voting. To construct the voting variable, we used an item in the ESS asking respondents which party they voted for in the most recent national election. We then coded each party into party families, following Mair and Mudde [77]. (TIFF)

S3 Fig. Rightwing populist indicators ("thin" and "thick" ideology), by party family voting. To construct the voting variable, we used an item in the ESS asking respondents which party they voted for in the most recent national election. We then coded each party into party families, following Mair and Mudde [77].

(TIFF)

S1 Table. Dimensions, item wordings, and response scales. (DOCX)

S2 Table. Descriptive statistics (arithmetic means), by country. (DOCX)

S3 Table. OLS regressions (pooled data) with climate policy attitudes as dependent variables.
(DOCX)

S4 Table. Within-country OLS regressions with climate change beliefs (factor) as the dependent variable.

(DOCX)

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Writing - original draft: Joakim Kulin, Ingemar Johansson Sevä.

Writing - review & editing: Joakim Kulin, Ingemar Johansson Sevä.

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