

# Historical Injustices and Outgroup Attitudes

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How do revelations of historical injustices affect dominant group members' attitudes toward an outgroup? Canonical theories of attitudinal updating make varied predictions about whether such information can change outgroup attitudes, and if so, whether those changes will persist over time. By relying almost entirely on single-wave survey experiments, the existing evidence is not well-suited to adjudicating between these theoretical accounts. By contrast, this study documents changes in public opinion in a real world case: the unexpected announcements of hundreds of suspected unmarked graves at former "residential schools" for Indigenous children in Canada in 2021. I find that intense media coverage of this historical injustice improved outgroup attitudes among non-Indigenous people surveyed just after versus just before the news first broke. Yet attitudes returned to baseline as coverage of this story declined over the following months. When the salience of this injustice increased again several months later, there is no observable attitudinal change. I argue that these patterns are most consistent with cognitive dissonance theory and show that the reversion in attitudes was greatest among White Canadians, a group that faced an especially large inconsistency between empathy for the outgroup and a desire to maintain a positive group identity.

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## INTRODUCTION

As a way to justify their privileged position in society, dominant groups often construct myths about themselves that ignore or minimize injustices that were committed in the past against other groups. Educational curricula underemphasize these uncomfortable histories and everyday forms of commemoration overlook them entirely (Billig 1995; Zimmerman 2005). As a result, dominant group members tend to be less knowledgeable about historical injustices than members of groups that were directly affected by them (Bonam et al. 2019; Nelson, Adams, and Salter 2013). This selective memory can in turn shape beliefs about the victims of past transgressions and the barriers to realizing equity and justice (Hirschberger et al. 2022; Iyer, Leach, and Pedersen 2004).

In this article, I investigate whether exposure to information about a dark history of intergroup relations can influence dominant group members' attitudes toward an outgroup. Canonical theories based around defensiveness, learning, salience and cognitive dissonance make distinct predictions about whether such information can change outgroup attitudes, and if so, whether those changes will persist over time. One challenge in reconciling these accounts is the lack of evidence from real world revelations of injustice and research designs that investigate the persistence of short-run effects.

I address these gaps in the existing literature through an analysis of relations between Indigenous and non-Indigenous peoples in Canada.<sup>1</sup> This is a useful case for studying the effects of historical information because, for generations, non-Indigenous people have been poorly informed about their country's historical mistreatment of Indigenous peoples (Boese, Neufeld, and Starzyk 2017; Schaeffli et al. 2018). Yet over the course of six weeks in 2021, hundreds of suspected unmarked graves were identified at several former state-run "residential schools" for Indigenous children. Indigenous communities had long known about the existence

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1. Throughout this text, I use the term Indigenous to refer to the original inhabitants of the land that is now called Canada, including First Nations, Inuit and Métis peoples. I use the term non-Indigenous to refer to those peoples that do not self-identify as members of any of these three groups, including settlers (the European-descended sociopolitical majority), non-Black people of colour (POC), and Black people (see Vowel 2016, Ch. 2).

of these unmarked graves, but non-Indigenous people were largely unaware of this history until the revelations in 2021 caused a sudden, massive increase in media and popular attention to this injustice.

Triangulating among several pieces of empirical evidence, this article examines how non-Indigenous people's beliefs in anti-Indigenous systemic racism and perceptions of Indigenous peoples' deservingness changed in the aftermath of these events. I first analyze responses to a nationally-representative survey in which the initial announcement of unmarked graves unexpectedly occurred mid-way through the survey's field dates. Second, I use repeated cross-sectional surveys to assess longer-run attitudinal changes. Third, I investigate survey responses before and after a national day of remembrance that triggered a renewed attention to the injustice several months after the initial announcement.

This analysis produces several findings. Contrary to theories of defensiveness, the sudden surge in media attention to the historical injustice caused a significant improvement in outgroup attitudes among members of the dominant group. But this change does not appear to have been driven by a standard Bayesian learning process: rather than updating to a new equilibrium, attitudes returned to baseline levels just four months after the news first broke. This attitudinal reversion coincided with a significant decline in media coverage of this issue, but the initial effects also do not appear to be driven entirely by salience considerations. When attention to the injustice increased again around a day of remembrance several months after the first revelation, there is no observable shift in outgroup attitudes.

These findings thus contradict the central predictions of theoretical frameworks based around defensiveness, learning and salience. Instead, I argue that the data supports a cognitive dissonance interpretation. While the unmarked graves announcements initially shocked non-Indigenous peoples' attitudes by introducing new concerns about outgroup suffering, the discourse around these injustices also raised difficult questions about Canada's self-image. Seeking to reconcile this inconsistency, dominant group members gradually reconfigured their belief system to minimize perceived wrongs against Indigenous peoples. In line with this

interpretation, I show that the reversion in attitudes after the initial revelations was most pronounced among members of a subgroup – White Anglophones – that is especially invested in a positive conception of their national identity.

This study makes several contributions. First, it advances our understanding of the role of information in shaping intergroup attitudes (Paluck and Green 2009; Hopkins, Sides, and Citrin 2019; Williamson 2020). Research on this relationship relies almost exclusively on tightly-controlled experiments rather than real world cases of exposure to new historical information. This approach gives less attention to how information processing happens outside of the experimental setting, where changing narratives and competing demands on attention are more prevalent. By contrast, I document temporal changes in intergroup attitudes, paying close attention to simultaneous changes in the informational environment. My findings thus echo recent calls in the media and politics literature to rethink “forced exposure” designs that do not consider how respondents might encounter information in their everyday lives (Benedictis-Kessner et al. 2019; Egami et al. 2023). Second, I add to an established body of work on the determinants of individual-level racism and attitudes toward racism. Beliefs in the existence of systemic racism and views of an outgroup have generally been treated as stable attitudes associated with early childhood socialization (Katz 1976; Kinder, Sanders, and Sanders 1996; Sears and Funk 1999; Tesler 2015), personality traits (Parker and Towler 2019; Sidanius and Pratto 1999) and long-run historical factors (Acharya, Blackwell, and Sen 2018). By contrast, this study shows that in certain circumstances, outgroup attitudes can change quickly in response to new information and feelings of cognitive dissonance (Engelhardt 2023). Finally, this study adds to a nascent literature on how awareness of historical injustices shapes intergroup attitudes (Bonam et al. 2019; Haas and Lindstam, n.d.; Fang and White 2022; Nelson, Adams, and Salter 2013; Beauvais and Williamson 2024). Echoing prior research, I show that information about past wrongdoing can improve attitudes toward a victimized group. However, much of the existing work in this area only investigates short-term changes from light-touch interventions. I show that the positive effects of historical

information can be short-lived, at least when the discourse around past wrongdoing threatens dominant group members' self-image.

Before proceeding, as a non-Indigenous scholar, it is important to acknowledge my position in this research (Kovach 2021; Wilson 2020). I do not represent or speak for Indigenous peoples; I instead bring an expertise in the study of public opinion and intergroup relations. My goal is for this article to advance reconciliation by illuminating how non-Indigenous people react to information about the history of colonialism and systemic racism.

## HISTORICAL INJUSTICES AND OUTGROUP ATTITUDES

This study is concerned with how members of dominant groups – those that hold a disproportionate share of societal resources, privileges, and power – react to information about historical injustices committed by their group against another group in the past. Dominant groups offer an informative case study for reactions to past injustices because their members are often deeply uninformed about their groups' troubled histories (Bonam et al. 2019; Kraus et al. 2019; Nelson, Adams, and Salter 2013). I focus on how historical information affects two types of outgroup attitudes: (i) beliefs in the existence of systemic racism; and (ii) perceptions of deservingness. While focusing on these measures excludes other important intergroup attitudes, these outcomes are especially informative about reactions to historical injustices, given their connections to how people understand the causes of contemporary inequality and the need for redress.

In this section, I review several canonical theories of opinion formation and consider their distinct predictions about how exposure to information about injustices might affect outgroup attitudes over time. Figure 1 illustrates graphically the central expectations of theories based on defensiveness, learning, salience and cognitive dissonance. As this plot makes clear, distinguishing between these different models requires an investigation of temporal patterns. Yet the existing public opinion literature on the relationship between information exposure and intergroup attitudes consists almost entirely of lab and online survey designs that only

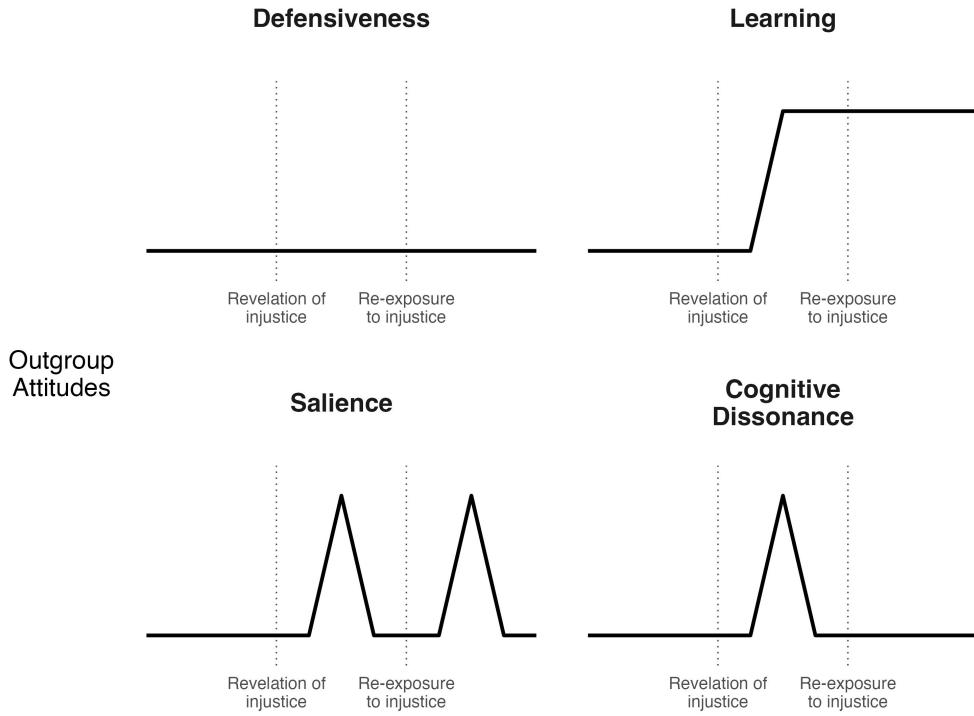


Figure 1: Stylized patterns of attitudinal updating after information exposure

Plots summarize theoretical expectations about the over-time relationship between exposure to injustices and outgroup attitudes. The  $x$ -axis tracks time, with the dotted lines indicating information exposure points, while higher values on the  $y$ -axis indicate more favourable outgroup attitudes.

measure outcomes at a single time point. For example, Paluck et al. (2021), in a review of prejudice reduction experiments conducted between 2007 and 2019, find that just 6% of studies investigate effects in real world settings and less than 3% test for the persistence of any effects beyond one month. By contrast, the present study investigates over time processes of attitudinal updating that follow an actual revelation of information about a historical injustice and also re-exposure to similar information. I use this design to distinguish between the theories presented in Figure 1.

### *Defensiveness*

A theory of **defensiveness** predicts that members of the dominant group will not update their attitudes at all in response to either new or well-known information about injustices. Norma-

tive theorists have articulated a problem of “White ignorance” (Mills 2007), in which many White people are not only unaware of past injustices and contemporary racism, but actively resist acknowledging oppression when presented with evidence (see also Knowles et al. 2014). Scholars from marginalized communities have long pointed to the challenges of overcoming dominant groups’ ingrained beliefs. W.E.B. Du Bois (1940, 175-6) noted that “attitude and action of the white world is ... a matter of conditioned reflexes; of long followed habits, customs and folkways; of subconscious trains of reasoning and unconscious nervous reflexes.” In the context of settler colonialism, Albert Memmi (1965) outlines how non-Indigenous groups rely on sanitized accounts of the past to justify their privileges and power over Indigenous peoples (see also Carleton 2021; LaRocque 2010). Stó:lō author Lee Maracle (2017, 25) concludes that “to be a white Canadian is to be sunk in deep denial.” Starblanket and Hunt (2020, 67) add that “even when colonial violence is acknowledged ... it is situated as a historical phenomenon that is disconnected from contemporary contexts.”

These arguments are reinforced by survey evidence showing that outgroup attitudes are formed early in life, making them especially resistant to updating in adulthood (Katz 1976; Sears and Funk 1999; Tesler 2015). Socialization into a dominant group identity can cause members of these groups to unconsciously discount signals about discrimination against an outgroup as a way to protect their own group-based self-esteem (K. Cole 2018; Hayward 2017; Hideg and Wilson 2020). Feldman and Huddy (2018) show that exactly this type of racially motivated reasoning correlates negatively with factual knowledge about historical discrimination in the United States. Nyhan and Zeitzoff (2018) similarly find that while correcting Israelis’ misperceptions about a historical injustice results in more accurate factual knowledge, it does little to move actual attitudes toward Palestinians. Overall, then, defensive reactions involve a failure to update attitudes after exposure to information about injustices. In some formulations of this theory, attitudes may even worsen after exposure to such information, as people resort to counter-arguments, emotional judgements and ingroup solidarity (for a discussion, see Guess and Coppock 2020).

## *Learning*

By contrast, **learning** involves a durable shift in attitudes after exposure to new information. Many Indigenous authors have highlighted the importance of historical knowledge in shaping perceptions of systemic racism in Canada. Taiaiake Alfred (2005, 152-4), a Kanien'kehá:ka scholar, argues that one of the main barriers to true restitution for the country's past wrongs is ignorance of historical realities by non-Indigenous society. Others have connected the country's "historical amnesia" to the persistence of racist attitudes among the non-Indigenous population (e.g. Bear and Andersen 2017; Jurgens 2020; Sinclair 2017).

Implicit in these arguments is the idea that gaining new information about past wrong-doing could inform a new belief system. Indeed, a nascent literature in social psychology demonstrates that dominant group members' lack of knowledge about historical discrimination is associated with an inability to recognize contemporary racism (Bonam et al. 2019; Nelson, Adams, and Salter 2013; Strickhouser, Zell, and Harris 2019). Much of the evidence for this hypothesis is correlational, but several studies have demonstrated that correcting the gap in historical awareness can improve attitudes towards an outgroup through emotional and learning mechanisms. Informational interventions describing the nature of past wrong-doing can trigger feelings of empathy or guilt, with positive downstream effects on attitudes (e.g. Iyer, Leach, and Pedersen 2004; Neufeld et al. 2022; Quinn 2021). Other research has shown that learning the historical context may increase individuals' beliefs in the systemic – as opposed to cultural or personal – causes of contemporary intergroup inequality (Fang and White 2022). These experiments fall under a broader class of informational interventions aimed at correcting misperceptions about outgroups, which have generally tended to result in attitudinal improvements (Bursztyn and Yang 2022; Grigorieff, Roth, and Ubfal 2020; Lees and Cikara 2020; Williamson 2020).

Yet few studies assess the persistence of attitudinal changes. In a standard Bayesian model of belief updating, exposure to genuinely new information can trigger a durable shift in attitudes, whereas re-exposure to similar information merely increases confidence in the new,

posterior beliefs. Coppock (2023) finds support for this argument, showing that informational treatments which prime pre-existing considerations tend to have fleeting effects on attitudes, while those that introduce new information tend to see more long-lasting change (see also Baden and Lecheler 2012). Yet there remain open questions about whether durable attitudinal changes can result from real world information exposure and from information related to intergroup relations, where concerns about status and redistribution are relevant.

Beyond merely a sustained shift in attitudes, observing a learning mechanism also implies that any attitudinal changes in response to new information should be greatest for those who were least aware of injustices against the outgroup at baseline (Bursztyn and Yang 2022). It is for these people that new information produces the largest shock to their prior beliefs, encouraging greater movement in the direction of that information.

### *Salience*

The remaining two patterns in Figure 1 are more pessimistic about the durability of attitudinal change. A longstanding literature highlights how, for one, the fleeting **salience** of an issue can shape public opinion (Ajzen 1980; Iyengar and Kinder 1987). Zaller (1992) argues that people form political opinions in the moment they are asked, sampling among competing considerations that are more or less available to them at any given time. When survey respondents are better able to recall pre-existing concerns about systemic racism and outgroup suffering – perhaps because they have recently been exposed to relevant information about a historical injustice in the media – they may be more likely to endorse its existence (see also Nelson, Oxley, and Clawson 1997; Tesler 2015). Relatedly, when issue salience is high, people may perceive social desirability considerations that lead them to report opinions in line with the majority’s views (e.g. Urbatsch 2020). But when attention to an issue fades, public opinion is likely to return to baseline as the relative mental “weight” given to past injustices declines. The general political science literature lends support to these arguments, finding that many of the persuasive effects of information are ephemeral, dissipating within just a few

weeks (e.g. Althaus, Bramlett, and Gimpel 2012; Gerber et al. 2011; Hayes and Myers 2009; Hill et al. 2013; Coppock, Ekins, and Kirby 2018).

These concerns are especially relevant when we consider how people update their beliefs in response to real world media coverage, rather than through closely-controlled experimental treatments. Mass media often devotes attention to issues in cycles, with an initial surge in coverage of a shocking story gradually dissipating over time (Boydston, Hardy, and Walgrave 2014; Downs 1972). Indigenous communities are deeply familiar with this pattern, regularly seeing the public’s interest wax and wane in response to tragic events that generate episodic media coverage (Y. Cole 2010; McCue 2023; Wilson-Raybould 2022). If attitudinal changes are driven solely by issue salience—sometimes called priming—then public opinion toward the outgroup should parallel these media cycles, temporarily improving whenever attention to injustices increases, regardless of whether that information is novel or already well-known.

### *Cognitive Dissonance*

In contrast to salience-based theories, **cognitive dissonance** can produce a pattern by which initially shocking information temporarily shifts attitudes, but after which there is a sustained reversion as people reconstruct their belief systems. In its original formulation, Festinger (1957) described cognitive dissonance as a kind of psychological discomfort that results from holding two or more “cognitions” (e.g. behaviours, beliefs, opinions) that are inconsistent with one another. When confronted with dissonance, people often engage in strategies to reduce this discomfort. In a classic example, a smoker who learns that smoking is bad for their health may quit smoking, discredit the threatening evidence, or justify the behaviour for its stress-relieving benefits. More often than not after experiencing dissonance, people will reconfigure their belief system so as to preserve the cognition that is initially most resistant to change (Harmon-Jones and Harmon-Jones 2007).

In a paradigmatic reformulation of the theory, Aronson (1969) linked cognitive dissonance to the self-concept. He argued that dissonance does not occur only when a person holds

inconsistent cognitions, but rather when there is an inconsistency between a given cognition and a person's desire to see themselves in a positive way. Most people want to believe that they are intelligent and moral, and so the greatest psychological discomfort arises when a new belief or attitude threatens this self-image. At the same time, according to Social Identity Theory, people's self-image is derived not just from their personal traits, but also their membership in social groups (Tajfel and Turner 1979). When a new cognition connects one's ingroup to a negative quality, dissonance can result as people try to reconcile the threatening cognition with their positive feelings toward their own group. This argument is consistent with research documenting the various types of counter-arguments that dominant groups employ to cope with uncomfortable facts about their group (e.g. Kendall 2022; Phillips and Lowery 2015).

Information about historical injustices is uniquely positioned to evoke dissonance. On the one hand, this information can cause empathetic responses and close gaps in knowledge about the structural causes of inequality (e.g. Fang and White 2022; Neufeld et al. 2022). At the same time, evidence of injustices challenges deeply held beliefs that one's ingroup should be held in high esteem. As noted earlier, when people hold incongruent beliefs, they are more likely to preserve those that are most resistant to updating.

One implication of cognitive dissonance theory is therefore that gaining information about historical injustices can initially improve attitudes toward an outgroup as people entertain new cognitions associated with empathy, guilt and historical knowledge. Over time, however, people must reconcile these cognitions with their prior positive attachments to their ingroup. As nêhiyaw scholar Kiera Ladner (2018, 248) explains, this requires non-Indigenous Canadians to confront their country's "mythologized exceptionalism ... as the good colonizer" (see also Logan 2014; Regan 2010; Wilson-Raybould 2022). To the extent that commitment to, for example, a belief in the inherent goodness of one's country, is more resistant to change, outgroup attitudes are likely to revert to initial levels as dominant group members attempt to reduce dissonance after the initial shock of exposure to an injustice.

A second implication that follows from this theory is that some people within the domi-

nant group may experience greater dissonance than others, and therefore more closely follow the reversion pattern described in the previous paragraph. These are people belonging to subgroups for which information about injustices is more threatening to their social identity and prior belief system. As I explain in further detail in the empirical section below, White Anglophones represent exactly this type of group in the Canadian case. If cognitive dissonance theory accurately describes how people process information about historical injustices, the attitudinal reversion in Figure 1 should be most pronounced for White Anglophones.

## INTERGROUP RELATIONS IN CANADA

In Canada, Indigenous and non-Indigenous peoples have had a contentious history since European colonization began in the 16<sup>th</sup> century. Non-Indigenous society has stolen the land of Indigenous nations, banned their governmental institutions and sought to destroy their cultures, all while denying Indigenous peoples many of the same rights and privileges afforded to non-Indigenous Canadians. Colonialism and discrimination have resulted in severe disparities in the economic, social and health outcomes of Indigenous peoples relative to non-Indigenous Canadians (Sawchuk 2020). While Canada as a whole ranked 12th globally on the United Nations' Human Development Index in 2016, Indigenous communities would have ranked 52nd, just ahead of Venezuela (Cooke 2019).

Today, both groups perceive a strained relationship: 49% of non-Indigenous Canadians and 60% of Indigenous people describe current relations negatively (Environics 2022). While many non-Indigenous people express support for improving the relationship (e.g. Abacus Data 2021; Reconciliation Canada 2016), anti-Indigenous attitudes also remain a strong undercurrent in non-Indigenous public opinion (Beauvais 2021).

### *The Residential School History*

Much of the contemporary tension between these two groups has been animated by a reckoning over the history of Canada's residential school system. Between the 1830s and 1990s,

approximately 150,000 Indigenous children were taken from their homes and sent to boarding schools across the country (Truth and Reconciliation Commission of Canada 2015). For most of this period, the schools were run by missionaries and funded by the government. Assimilation was the cornerstone of this policy from its inception: children were given Christian names, stripped of their traditional clothing and hair styles, and forbidden from speaking their Indigenous languages. As one government official told a parliamentary committee in 1920, “I want to get rid of the Indian problem … our objective is to continue until there is not a single Indian in Canada that has not been absorbed into the body politic” (quoted in Titley 1986, 50).

Survivors describe nearly universally negative experiences at the schools (e.g. Knockwood and Thomas 1992; Sellars 2013). Physical and sexual abuse were common, and over 4,000 deaths have officially been documented, but the true number is likely far higher (Puxley 2015). Children died due to malnutrition, building fires, suicide, failed escapes and infectious diseases, although the cause of death remains unknown in at least half of all deaths (TRC 2015, vol. 4). Due to cost considerations, government policy was generally not to transport the bodies of children who died at the schools back to home communities. As a result, the grounds of many former schools contain unmarked burial sites, a large number of which are poorly documented, overgrown and inactive (Hamilton 2021).

Canada began reckoning with the residential school history in the 1990s, but it did not become a national political issue until the early 2000s, when a series of civil litigation cases over abuse at the schools were combined into a class action suit and settled by the government (Miller 2017). The 2006 settlement established a \$1.9 billion compensation package for survivors and a Truth and Reconciliation Commission that would document the history of the residential school system. The TRC began in 2008, the same year that the government made an official apology to survivors in the House of Commons, and issued its final report in 2015.

### *Awareness of the Residential School History*

Despite these official steps toward reconciliation, most non-Indigenous people remain uninformed about the residential school history. When the TRC was first established, it commissioned a survey of Canadians and found that only 51% of non-Indigenous respondents had ever heard of residential schools. That number improved over time, increasing to two-thirds after the Commission released its final report in 2015. As Figure 2 shows, however, non-Indigenous Canadians' awareness of the schools only caught up to Indigenous peoples' in 2022, after extensive media coverage of this history in the year prior (see below).

Simply asking whether respondents have heard of residential schools also obscures the fact that few non-Indigenous people have much more than a superficial knowledge of this issue. Beauvais and Williamson (2024) administered a three-item quiz on basic facts about residential schools to members of the general population, finding that 54% of respondents did not know the answers to any of the questions and only 15% correctly answered more than one question. These figures comport with recent research among undergraduate students (Boese, Neufeld, and Starzyk 2017; Schaeffli et al. 2018).

### *Announcements of Suspected Unmarked Graves*

Non-Indigenous Canadians' lack of historical knowledge was suddenly disrupted in 2021. On May 27 of that year, Tk’emlúps te Secwépemc First Nation announced it had identified a suspected 215 unmarked graves at the former Kamloops Indian Residential School using ground-penetrating radar technology. While survivors of the schools had long known about the possibility of such graves, this announcement was wholly unexpected among non-Indigenous Canadians. The Truth and Reconciliation Commission had alerted the country to the likely presence of unmarked burials at former schools in its 2015 report and a small number of Indigenous communities had conducted searches or accidentally uncovered remains at former school sites before 2021. Yet these earlier stories were not widely covered in the media and so few non-Indigenous people were aware of this possibility (see Appendix Figure A8). Just a

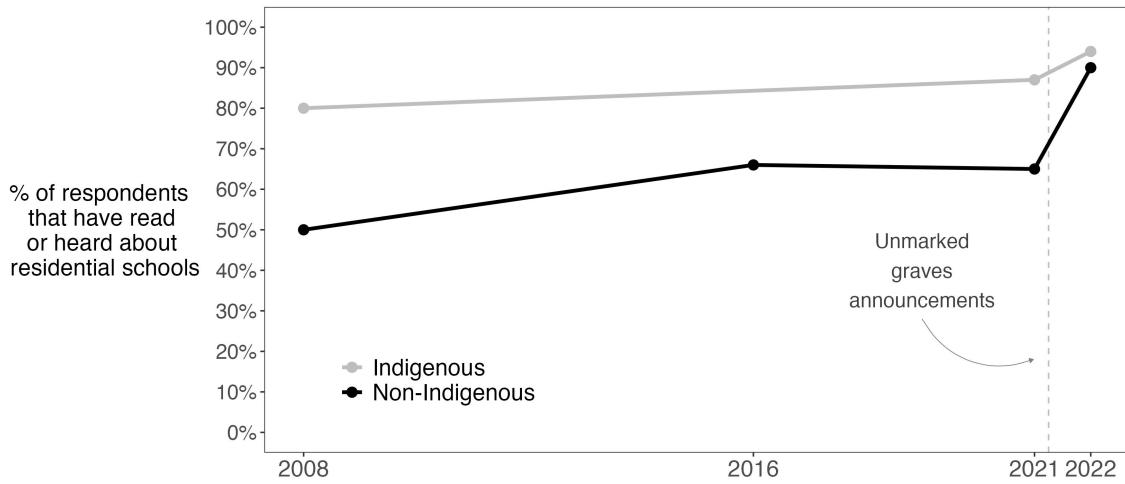


Figure 2: Awareness of residential school history, 2008 to 2022

Plot presents the percentage of respondents that answered “yes” to the question (with small variations in wording), “Have you heard or read anything about Indian Residential Schools?” Note: the 2021 survey occurred prior to the announcements of unmarked graves at former school sites. Data are from four polls: Truth and Reconciliation Commission National Baseline Survey (2008); Environics Canadian Public Opinion on Aboriginal peoples (2016); Canadian Reconciliation Barometer (2021; 2022).

few days after the first announcement of suspected graves, 68% of Canadians said they were surprised by the news (Abacus Data 2021).

Over the following six weeks, three more Indigenous communities announced similar findings of suspected children’s remains at former schools and the unmarked graves quickly became the most important news story in the country. To illustrate the media’s sudden and intense interest in this issue, I assembled a corpus of every article published in six of Canada’s largest English-language newspapers over the course of 2021.<sup>2</sup> I then identified whether each article contained the term “residential schools” (these results resemble estimates from a topic modelling approach; see Appendix B.3).

Figure 3 presents a weekly rolling average of the percentage of articles containing this term over the course of 2021. In the months leading up to the first unmarked graves announcement in Kamloops, the Canadian media almost never discussed the residential schools history. Immediately afterwards, coverage increased more than tenfold, with subsequent spikes in attention coming in response to revelations of unmarked graves at other former school sites.

2. French language sources were not available in a machine readable format at the time of writing.

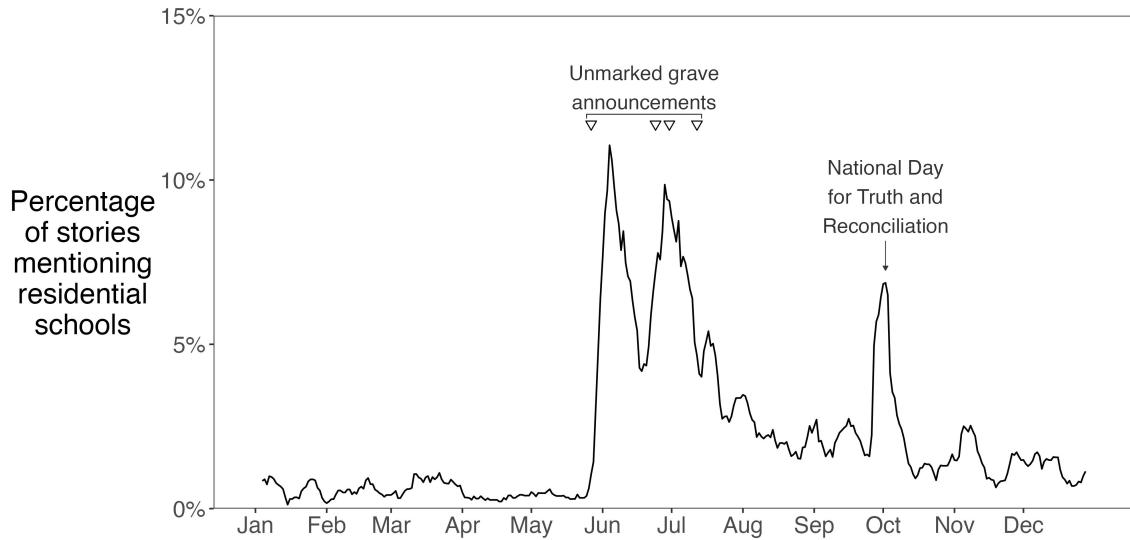


Figure 3: Prevalence of residential schools coverage in Canadian newspapers, 2021

Plot presents a 7-day rolling average of the percentage of news stories in six of Canada's largest English-language newspapers that contain the term "residential school(s)."

At this time, more than one in every ten articles referenced residential schools in some context. In Appendix B.4, I look at the prevalence of the residential school history over the preceding two decades and from that data it is clear that this period in 2021 represented the most intense exposure that Canadians ever had to this historical injustice. However, the media's focus on this story declined precipitously as a federal election approached on September 20. Coverage briefly increased again around September 30 to mark the country's first National Day for Truth and Reconciliation, a newly created holiday to honour the victims of the residential school system.

While the media's attention to this topic declined over time, the sudden initial increase in coverage captured the attention of the public: shortly after the first announcement of unmarked graves, 93% of respondents said they had heard the news, with over 60% following the story "very" or "quite" closely (Abacus Data 2021). Impromptu demonstrations, vigils and remembrance walks were also organized.

Over time, attention to the injustices of the residential school system was also accompanied by discourse that called into question Canadians' positive attachment to their national identity.

Shortly after the first announcement, Prime Minister Justin Trudeau ordered the Canadian Flag to be flown at half-mast as the country mourned the deaths of the children that never returned home. In later months, disagreements surfaced over when it would be appropriate to restore the country's national symbol. Similarly, debates emerged about whether to celebrate Canada Day, the country's national holiday; a number of municipalities opted to cancel their official celebrations, despite the unpopularity of this position (Leger 2021). “No Pride in Genocide” demonstrations were held in several cities across the country (Scherer 2021). Over the course of the summer, statues that honoured the architects of the residential school system and other symbols of colonialism were torn down in protests or otherwise removed. Several churches were targeted by vandalism and arson for their connection to the missionaries who ran the schools. Calls were made for a Toronto university to be renamed, given its namesake’s role in establishing the residential school system.

Messaging from political elites reinforced the idea that the unmarked graves announcements had important implications for how Canadians should think about their national identity. Conservative leader Erin O’Toole, for example, stated that he was “very proud of our country, despite the scars from our past” and that he was “concerned that injustices in our past, or in our present, are too often seized upon by a small group of activist voices who use it to attack the very idea of Canada itself” (quoted in French 2021; Taylor 2021). Members of the centre-left Liberal government were more encouraging of thoughtful reflection on Canadian history and symbolism, but also condemned the statue removals and attacks on churches. Importantly, the discourse around Canadian identity largely emerged only after the survey field dates that I use to test for short-run effects, as described in the next section.

## EMPIRICAL ANALYSES

As the previous section documented, non-Indigenous people were deeply uninformed about the residential school system before 2021 and the unmarked grave announcements were a shocking revelation to many of them. In this section, I present the results from several empirical inves-

tigations into how non-Indigenous people updated their attitudes toward Indigenous peoples after the injustices became widely publicized. I begin by looking at the short-run effects of the unmarked grave announcements, and then ask how the resulting attitudinal changes accord with the distinct theoretical expectations in Figure 1.

For all of these analyses, I define outgroup attitudes as respondents' average agreement on a Likert scale with the following two measures:

1. **Beliefs in Systemic Racism:** "Generations of colonialism and discrimination have created conditions that make it difficult for Indigenous peoples to work their way out of poverty."
2. **Perceptions of Deservingness:** "Over the past few years, Indigenous peoples have gotten less than they deserve."

These items are part of a larger "Indigenous resentment" scale based on a measure developed in the American context (Beauvais 2021; Kinder, Sanders, and Sanders 1996), although the other items in the scale were not available in the surveys used in this study. The two statements are especially useful for gauging reactions to historical injustices because, in the first case, respondents are asked to explicitly think about historical antecedents to contemporary inequality (2018), while in the second they make judgements about deservingness, which is closely associated with people's support for reparations (Reichelmann, Roos, and Hughes 2022). While the two items capture distinct concepts, I take the average score across the two variables to facilitate interpretation. The correlation between the two measures is 0.71 and results are nearly identical when analyzing the items separately.

### *Initial Attitudinal Effects*

I begin by looking at how non-Indigenous people's beliefs about Indigenous peoples changed in the immediate aftermath of the first news story about the unmarked graves. Using a national survey that was in the field when the unmarked graves were initially announced, I compare responses from those interviewed just before versus just after the announcement. The online survey, fielded by the Consortium on Electoral Democracy (C-Dem) in May and

June 2021, collected 3,853 responses from non-Indigenous Canadians in the eight days before and eleven days after the unmarked graves story broke (Harell et al. 2022). Because the timing of this event was unexpected, whether respondents were surveyed before or after the announcement is essentially as-if random, providing causal leverage on the effects of the sudden increase in media attention (Muñoz, Falcó-Gimeno, and Hernández 2020). Balance tests confirm that pre- and post-announcement respondents exhibit no meaningful difference in their baseline characteristics, except that those surveyed after the first announcement were marginally younger on average (see Appendix Table A3 and Figure A9). Given the surprising nature of the first announcement, there is no reason to expect that this imbalance is driven by any kind of endogenous selection; in any case, I control for age using birth-decade fixed effects.

Focusing only on the sample of respondents who do not self-identify as Indigenous,<sup>3</sup> I run the following OLS regression:

$$\text{OutgroupAttitudes}_i = \beta \text{PostAnnouncement}_i + \mathbf{X}_i \gamma + \varepsilon_i$$

where  $\text{OutgroupAttitudes}_i$  is respondent  $i$ 's average agreement with the two items described above,  $\text{PostAnnouncement}_i$  is a binary indicator for whether a respondent was surveyed after the news first broke and  $\mathbf{X}_i$  is a vector of pre-treatment covariates used to improve statistical efficiency (see notes to Table 1 for full list of variables). Under the as-if random assignment of respondents to the pre- and post-announcement samples,  $\beta$  captures the causal effect of the event on outgroup attitudes.

Table 1 presents the  $\hat{\beta}$  estimates. The outcomes have been standardized such that the coefficients measure effect sizes in terms of pre-announcement standard deviations. Regardless of whether I adjust for pre-treatment covariates or not, there is a robust improvement in outgroup attitudes after the announcement. The combined measure of agreement with the

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3. Measuring Indigenous identity is complex. In this study, I exclude all respondents who select “Indigenous (e.g. First Nations, Métis, Inuit, etc.)” from a list of racial and ethnic categories in a self-identification question, regardless of whether they also select another identity group.

Table 1: Intent-to-treat effects of unmarked graves announcement

	Outgroup (Indigenous) attitudes		Falsification checks: Feeling thermometers		
	Unadjusted estimates	Adjusted estimates	Racial minorities	Chinese people	Muslims in Canada
Surveyed after graves announcement	0.113* (0.032)	0.099* (0.030)	0.029 (0.031)	0.016 (0.032)	0.047 (0.031)
Observations	3,849	3,752	3,681	3,695	3,687
Controls	No	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.003	0.197	0.143	0.111	0.174

Robust standard errors in parentheses. Coefficients are expressed in terms of pre-announcement standard deviations. In columns 2 to 5, the following covariates are included but not reported: gender, born in Canada, education, household income, party ID, political interest, religion, language, ethnicity, electoral district Indigenous percentage, province, and birth-decade fixed effects. \*p<0.05

existence of systemic racism and perceptions of deservingness increased by about 10% of a standard deviation on average. This effect size is comparable to estimates from experiments testing the effectiveness of more interventionist prejudice-reducing methods, like door-to-door canvassing (e.g. Kalla and Broockman 2021). The effect is also larger than survey experiments that provide short informational texts about the historical causes of racial inequality in the United States (e.g. Fang and White 2022).

The estimates are also probably understating the impact of the news. The initial announcement was made late on a Thursday night, but most media outlets did not begin covering the story intensely until the following Monday (see Appendix B.2). If I instead treat that date as when the informational treatment truly began, effect sizes are around 25% larger (see Appendix Table A4). The survey also only covers the first eleven days after the news broke. In Appendix C.2, I show that beliefs in structural racism were trending upward over the post-announcement period as the story became more widely known. The initial effects of the announcement reported in Table 1 should therefore be treated as a lower bound.

The remaining columns of Table 1 report the results of falsification tests assessing whether feeling thermometers toward other, non-Indigenous groups changed after the first unmarked graves announcement. (Feeling thermometers for Indigenous peoples were not available). If

there was some secular trend in support or empathy toward marginalized groups in general over the survey period, there should be positive effects of the post-announcement indicator on these outcomes as well. Instead, movement on feelings toward these other groups is minimal – around 3 percent of a standard deviation on average – and statistically insignificant.

Overall, the results in Table 1 demonstrate that, at least initially, non-Indigenous people’s reactions to the unmarked graves announcement did not exhibit attitudinal changes consistent with defensiveness. On average, attitudes toward the outgroup immediately improved, rather than worsened. Yet despite these average effects, it is natural to wonder whether particular subgroups within the dominant group reacted defensively while others did not. I do not find strong evidence for this hypothesis. For one, the variance of the outcome variable is nearly identical in the pre- and post-announcement samples ( $F$ -test  $p=0.99$ ). If the announcement triggered polarized reactions among particular subgroups, there should be greater variability in responses among those exposed to the news. In Appendix C.5 I also investigate whether the average effects in Table 1 are masking countervailing impacts on, for example, conservatives versus liberals, or newcomer versus multi-generation Canadians. Adopting an inductive approach, I train a causal forest using the survey data around the initial announcement, allowing me to descriptively characterize the determinants of individual-level treatment effects for each respondent in the sample (Wager and Athey 2018). The central conclusion from this analysis is that there is little variance in terms of how different partisan and other groups reacted to the news. In fact, the point estimate treatment effects indicate that 90% of the respondents in the sample saw an improvement in their outgroup attitudes, suggesting there was very little backlash.

### *Learning and Attitudinal Persistence*

The previous section demonstrated that the dominant group’s outgroup attitudes initially improved after exposure to information about a historical injustice. If this change was driven by a learning mechanism, we should observe (a) that the initial effects were larger for those

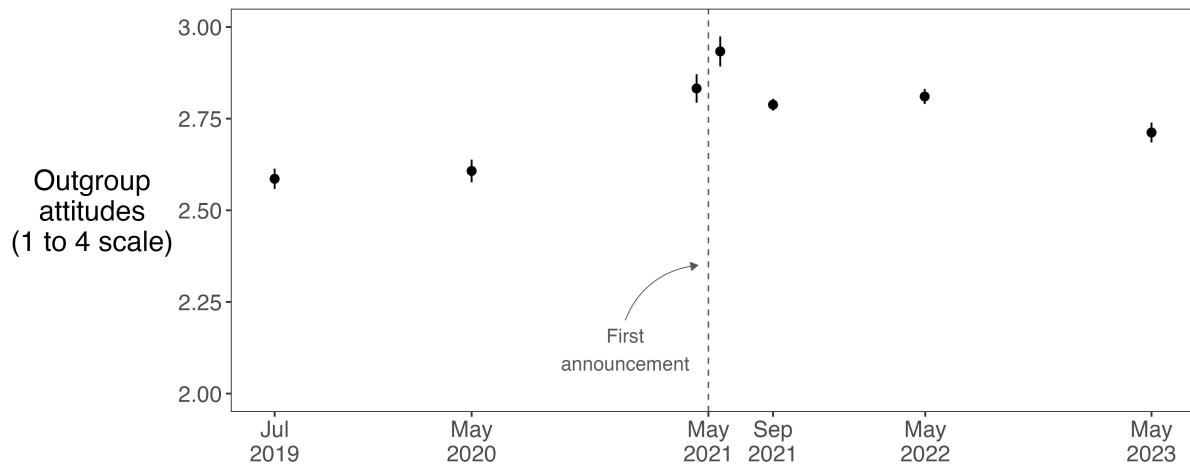


Figure 4: Non-Indigenous Canadians' attitudes toward Indigenous peoples, 2019 to 2023

Plot presents average and 95% confidence intervals for the mean of a respondent-level average of the two items measuring outgroup attitudes, with higher values indicating more favourable attitudes (see Appendix Table A17 for each item plotted separately). In all but the September 2021 survey, this question was asked on a four-point Likert scale. For that specific survey, a five-point scale was used, but responses have been rescaled to match the four-point scale (see Appendix Figure A18 for individual response level prevalence over time). ( $n=35,494$ )

who were less aware of injustices against Indigenous peoples before the unmarked graves announcements and (b) that the initial effects persisted over time as the information caused people to durably update their belief systems.

On the first implication, I do not have precise measures of historical knowledge with respect to Indigenous peoples, so I instead test for differential effects across several proxy measures: political knowledge, self-reported political interest, education level and time spent following the news. The assumption here is that people who are more informed about general political and social issues are also more likely to have had some familiarity with the residential schools history before the unmarked graves announcement. However, using the causal forest model described in the previous section, I find no significant differences in effect sizes across different levels of these various indicators of knowledge (see Appendix C.5). This finding does not support a learning interpretation of the initial attitudinal change.

On the second observable implication of a learning mechanism, Figure 4 tracks outgroup attitudes over the course of six cross-sectional surveys commissioned by C-Dem between 2019

and 2023. In total, these surveys include over 35,000 respondents. The vertical dashed line indicates the timing of the first unmarked graves announcement, with the points directly on either side of that line providing a graphical analog to the results in Table 1. Despite the significant improvement in outgroup attitudes in the immediate aftermath of the announcement, average scores had essentially returned to pre-announcement levels just a few months later. No further improvements in beliefs were apparent in the May 2022 or May 2023 surveys. While the results here are not causally identified, they do suggest that, contrary to a learning-based explanation, the short-run effects were not followed by any persistent shift in attitudes after the unmarked graves announcement.

Another pattern is important to note in Figure 4. Shortly after the May 2020 survey, the murder of George Floyd in the United States triggered a period of reckoning with racism in Canada. When a new survey was fielded in May 2021, general feelings toward racialized Canadians had improved (see Appendix D.6), likely producing spillover effects on attitudes toward Indigenous peoples.<sup>4</sup> One explanation for the changes between these two dates is genuine learning. There are several differences between the unmarked graves announcements and George Floyd’s murder that might explain why we see such a mechanism in the latter case but not the former. For one, the sheer volume of coverage was greater in the George Floyd case. This fact, combined with the waves of protest across numerous countries, may have increased the likelihood that people actually assimilated new information relevant to their outgroup attitudes. Relatedly, the George Floyd moment occurred early in the Covid-19 pandemic, when public health restrictions meant that more people were closely following the story from home (see Appendix D.6 for evidence from Google search data), which potentially resulted in greater information uptake. Finally, the events of 2020 were potentially less threatening to Canadians’ self-image, given that the relevant injustice occurred in a neighbouring country that many view as more racist than their own (Silver 2021; Thompson 2022).<sup>5</sup> Regardless of

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4. Note that the patterns in Figure 4 raise the possibility that the short-run effect I identified in the previous section is merely part of a longer-run time trend. In Appendix C.3, I use a series of placebo time checks to rule out this explanation, showing instead that the attitudinal shift is discontinuous around the initial announcement.

5. There are, however, empirical challenges with inferring a learning mechanism from the data in Figure 4.

the precise mechanism that explains public opinion change in Canada after George Floyd’s murder, the estimates in Figure 4 do not suggest that the unmarked graves announcements triggered genuine learning and sustained attitudinal change.

### *Salience and Re-Exposure to Injustices*

The reversion in attitudes between May and September 2021 in Figure 4 coincided with a precipitous decline in media attention to the injustice (see Figure 3). Salience theory offers one explanation for this pattern: dominant group members only report more favourable attitudes toward an outgroup when relevant injustices against that group are top-of-mind.

To further scrutinize this explanation, I turn to public opinion data around Canada’s first ever National Day for Truth and Reconciliation (NDTR). This official day of remembrance, intended to honour the victims of the residential school system, occurred on September 30, eighteen weeks after the first unmarked graves announcement. Coincidentally, this date fell in the middle of the field dates for the second 2021 survey described above, allowing me to again compare those surveyed just before and after attention to the relevant historical injustices suddenly increased.

By this time, media coverage of the injustice had declined to pre-announcement levels: just 2% of articles mentioned the term “residential schools” in the week preceding the NDTR. As the upper panel of Figure 5 shows, however, on the NDTR itself, more than 1 in every 5 stories mentioned residential schools. This volume of coverage is roughly equivalent to the prevalence in the days following the initial unmarked graves announcement in May. The NDTR also coincided with a number of public acts of solidarity and mourning that further raised the salience of the residential school injustices.

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In effect, there are many plausible, but unobservable, trajectories of public opinion between May 2020 and May 2021, some which are consistent with learning and some of which are not. For example, the six week trial of the police officer responsible for George Floyd’s death occurred in the month prior to the May 2021 survey field dates. This event renewed attention to the initial injustice, possibly priming a positive shift in attitudes. In the period before this trial, we cannot be sure that public opinion did not follow a similar pattern as in the unmarked graves case: a large initial improvement in attitudes, followed by a reversion. (Reny and Newman (2021) find some evidence for this kind of pattern in the United States after George Floyd’s murder). This possibility wouldn’t be observable in Figure 4 if the trial had its own attitudinal effects.

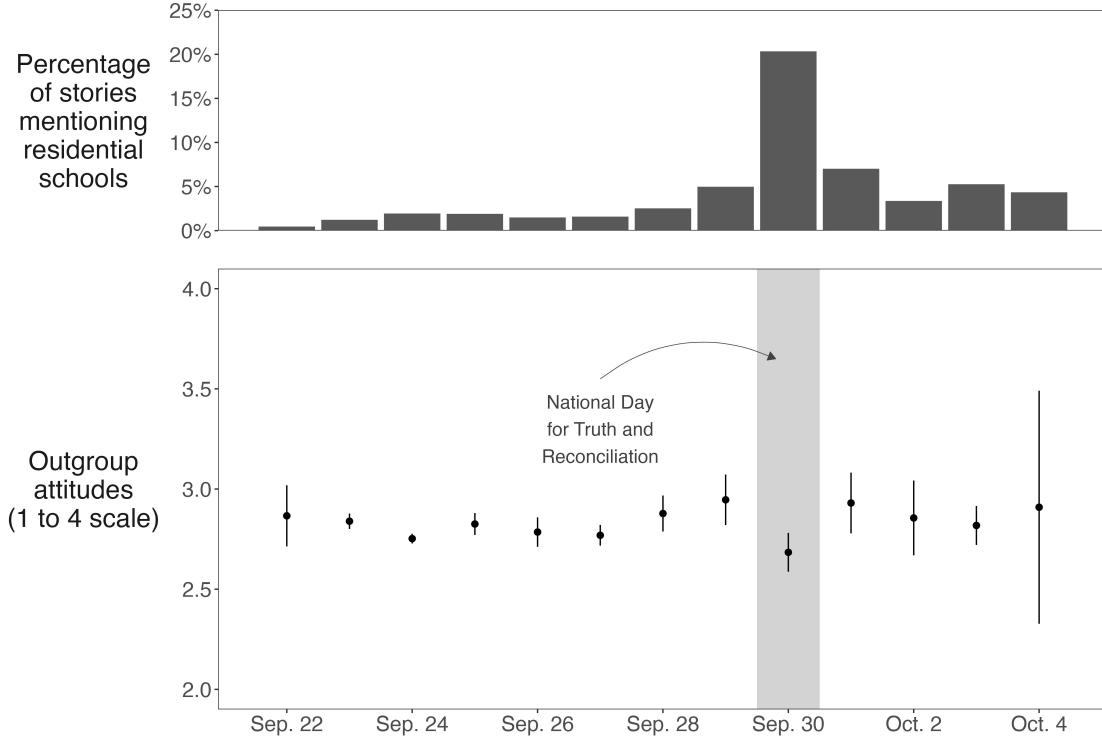


Figure 5: Media coverage and outgroup attitudes around the NDTR

The upper panel reports the percentage of news stories in six of Canada’s largest English-language newspapers that contain the term “residential school(s)” by survey date in the 2021 Canadian Election Study. The bottom panel presents mean and 95% confidence intervals for outgroup attitudes among respondents for each date, with higher values indicating more favourable attitudes. ( $n = 13,388$ )

In the bottom panel of Figure 5, I evaluate how non-Indigenous Canadians responded to this renewed attention. The plot charts the daily average agreement with the two outgroup attitudes items that were used in the analyses above. There is no distinct trend or discontinuous change in respondents’ scores on these variables after the NDTR to indicate a positive effect of the renewed media coverage. If anything, respondents exhibited worse attitudes toward Indigenous peoples on the holiday itself, when attention to the residential schools was greatest. In Appendix E.2, I estimate the impact of being surveyed on or after the NDTR, finding only small and statistically insignificant effects. These results call into question a purely salience-based explanation for the initial effects of the unmarked graves announcement. If non-Indigenous public opinion changes only in response to the heightened attention to historical injustices, there would have been some detectable shift in attitudes

after the NDTR.

### *Cognitive Dissonance and White Anglophone Identity*

The preceding analyses suggest that theories of defensiveness, learning and salience do not adequately characterize changes in non-Indigenous people’s intergroup attitudes after the revelation of injustices in Canada. The short-run shift in attitudes, followed by a gradual reversion, is instead more indicative of dominant group members seeking to reduce the cognitive dissonance between an initial empathetic recognition of injustice against an outgroup and a more deeply held desire to maintain a positive perception of their ingroup. Implicit in this theory is the idea that the need to reduce dissonance will be greatest among those whose group-based self-image is most threatened by discourse around the injustice.

As described earlier, discussions about the unmarked graves not only described the injustices of residential schools, but also challenged positive portrayals of Canadian identity. In the Canadian context, White Anglophones offer a useful case for investigating how this identity threat shaped attitudinal updating. In the United States, whiteness “is often viewed as synonymous with ‘American’” and White identity strongly predicts identification with the nation (Jardina 2019, 120; see also Devos and Banaji 2005). A similar pattern exists in Canada, except a linguistic cleavage complicates the relationship: while most White Anglophones see themselves foremost as Canadians, White Francophones tend to identify more with a Québécois or French Canadian subnational identity (see Beauvais and Stolle 2022; Soroka, Johnston, and Banting 2006).<sup>6</sup>

To illustrate White Anglophones’ national identity attachments and their sensitivity to identity threats, I use public opinion data from the September 2021 Canadian Election Study and the October 2020 World Values Survey to estimate bivariate associations between racial-linguistic identity and several group-based attitudes (see Appendix F.5 for details on the

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6. In the analyses here, I identify respondents as White if they only self-identify with this racial category and no others. Language is based on the survey language chosen by the respondent. In the C-Dem data, over 95% of Francophones live in Quebec; results are nearly identical if I instead differentiate between White people in Quebec versus the rest of Canada (see Appendix F.5).

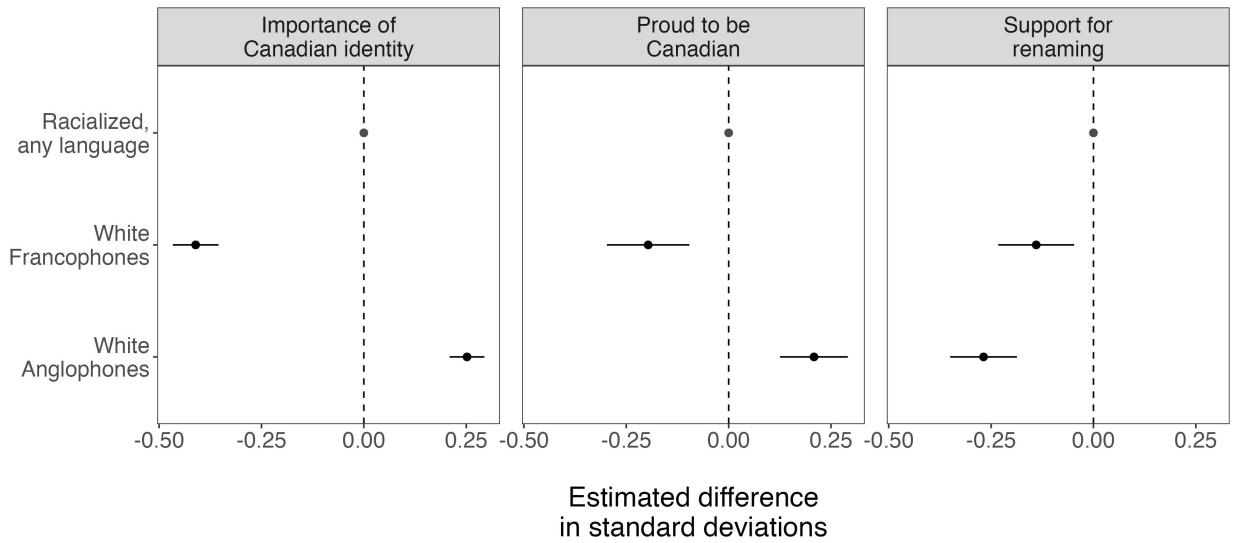


Figure 6: Bivariate associations between White identity and group attitudes

Plots summarize coefficient estimates and 95% confidence intervals from three models, each regressing the variable listed in the column heading on a categorical variable indicating the identity group listed on the *y*-axis (“racialized, any language” is the reference category). Coefficients have been standardized such that estimates represent standard deviation changes. Data for the first and third models are from the September 2021 Canadian Election Study and data for the second model is from the October 2020 World Values Survey ( $n=13,011$ ; 3,881; and 3,864, respectively).

analyses here). As the first two panels of Figure 6 show, White Anglophones have an especially close connection to their national identity. This group assigns 0.25 and 0.66 standard deviations greater importance to their Canadian identity and reports 0.21 and 0.40 standard deviations greater pride in Canada relative to racialized respondents and White Francophones, respectively.

This strong sense of national identity makes White Anglophones especially sensitive to discourse that frames Canada and its history in a negative light. The final panel in Figure 6 looks at respondents’ attitudes toward “renaming buildings and institutions that are named for people who built or ran parts of the residential school system.” White Anglophones registered 0.27 and 0.13 standard deviations lower support for this proposal than racialized and White Francophone respondents, respectively. These results comport with findings from a poll taken three weeks after the first unmarked graves announcement, in which 70% of White Canadians said that they believed that their country’s history was something to celebrate, rather than be ashamed of, compared to 59% of non-White respondents (Leger 2021). White people in that

survey were also significantly less likely to agree with the statement, “with all the questions about Canada and its historical record, it would be best to cancel Canada Day this year.” (Cross-tabulations by race and language were not available, although nearly three quarters of White Canadians are Anglophones).

Given White Anglophones’ strong attachment to their Canadian identity, how did members of this group update their outgroup attitudes after the discourse around the unmarked graves, which not only informed them about past injustices but also challenged their positive conceptions of Canada’s self-image? To answer this question, I use the same repeat cross-sectional data from Figure 4 to estimate an event study regression of the form:

$$\text{OutgroupAttitudes}_{it} = \sum_{\tau=2020}^{2023} \left[ \beta_\tau \mathbb{1}_{t=\tau} \text{WhiteAnglophone}_i + \mathbf{X}'_{it} \gamma_\tau \mathbb{1}_{t=\tau} + \delta \mathbb{1}_{t=\tau} \right] \\ + \phi \text{WhiteAnglophone}_i + \mathbf{X}'_{it} \eta + \epsilon_{it}$$

The key term in this setup is  $\mathbb{1}_{t=\tau} \text{WhiteAnglophone}_i$ , representing interactions between each time period and an indicator for whether a respondent is a White Anglophone.<sup>7</sup> The coefficients on these interactions,  $\beta_\tau$ , capture the difference in the change in outgroup attitudes between White Anglophones and all other respondents at each time period relative to the period immediately before the first unmarked graves announcement. The estimates of these parameters thus summarize the extent to which White Anglophone attitudes worsened at a greater rate over time than they did for other groups.

The  $\mathbf{X}'_{it} \gamma_\tau \mathbb{1}_{t=\tau}$  term models interactions between a vector of control variables and the same time period indicators. The inclusion of this term helps ensure that the observed over time changes between White Anglophones and other respondents are not confounded by over time changes in the influence of other variables, like partisanship or religion (see notes to Figure 7 for the full list of covariates used). Finally,  $\text{WhiteAnglophone}_i$  and  $\mathbf{X}_{it}$  are included as

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<sup>7</sup>. There reference category therefore includes both White Francophones and racialized respondents speaking either language. In Appendix F.3, I re-estimate the model with complete interactions between language and White identity. The results are qualitatively similar, showing that the attitudinal reversion is greater for White Anglophones than both White Francophones and racialized respondents.

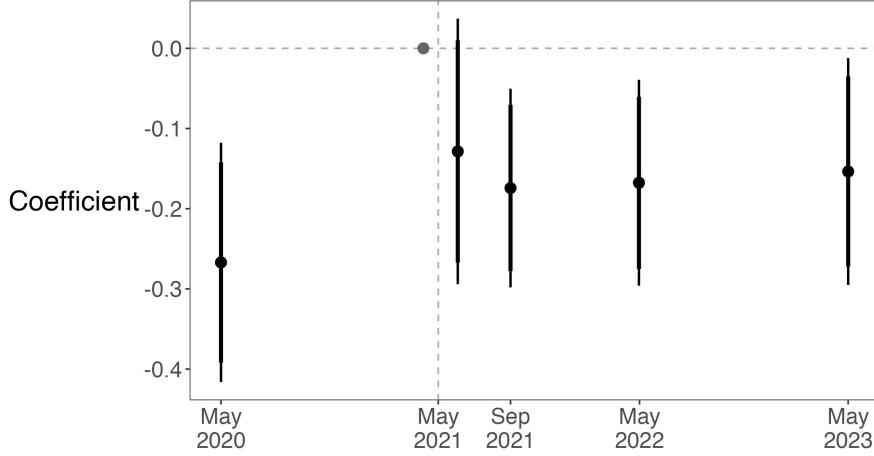


Figure 7: Event study estimates of White Anglophone identity on outgroup attitudes

Coefficients and 95% robust confidence intervals come from the event study model described in text (pre-announcement respondents in May 2021 are the reference category). Estimates represent the difference in the over-time change in outgroup attitudes between White Anglophones and all other respondents at each survey period. Outcome is scaled in terms of May 2021 pre-announcement standard deviations. Model also includes the following covariates and their interactions with the time period variable: gender, Party ID, immigration status, religion, local Indigenous population share, region and birth decade fixed effects. ( $n=29,467$ ).

non-time varying covariates to account for baseline differences in outgroup attitudes. Because this dataset is not a panel with repeated measures of the same respondents, there are no respondent-level fixed effects; the  $\delta \mathbb{1}_{t=\tau}$  term represents survey period fixed effects.<sup>8</sup>

Figure 7 plots the  $\hat{\beta}_\tau$  estimates. The points to the right of the vertical dashed line indicate the differences between White Anglophones and other respondents in terms of the changes in their outgroup attitudes for each time period after the initial announcement. For example, the point immediately to the right of the dashed line indicates that the shift in attitudes that occurred immediately after the first unmarked graves announcement was around 0.1 standard deviations smaller for White Anglophones than it was for all other respondents. The fact that the confidence interval around this estimate crosses zero indicates that the initial effects of the first announcement were not significantly different between these two groups.<sup>9</sup>

8. Note that this analysis excludes the 2019 survey in Figure 4, because a comparable measure of racial identity was not available in that year.

9. The leftmost point estimate indicates that White Anglophones' attitudes outgroup attitudes improved substantially more than other respondents between May 2020 and May 2021. In addition to the factors behind this improvement described in the previous section, White Anglophones may have exhibited an especially large improvement in their attitudes toward Indigenous peoples over this period because their pre-George Floyd

However, the subsequent coefficient estimate indicates that between the period right before the first announcement and September 2021, White Anglophones' attitudes worsened by around 0.2 standard deviations *more* than other respondents'. To be sure, both groups' attitudes displayed some degree of reversion over this period (see Appendix F.2), but there is a differential negative trend among White Anglophones. The May 2022 and May 2023 estimates are also negative and statistically significant, suggesting that the regression in attitudes that followed the initial improvement was notably larger for White Anglophones than it was for other groups at these time points as well.<sup>10</sup> Interpreted alongside the evidence of White Anglophones' susceptibility to identity threat in Figure 6, these results suggest that cognitive dissonance offers a plausible explanation for ephemeral attitudinal changes that followed the unmarked graves announcements in 2021.

## CONCLUSION

This study has investigated how dominant group members react to information about historical injustices committed against an outgroup. Looking at the announcements of unmarked graves at former schools for Indigenous children in Canada in 2021, I demonstrated that non-Indigenous people updated their outgroup attitudes in the immediate aftermath of these events. There are meaningful short-run improvements in beliefs about anti-Indigenous systemic racism and perceptions of deservingness, although these changes reverted to baseline levels within just a few months. This regression coincided with a decline in media coverage related to residential schools, but a renewed attention to this history months later did not produce any improvement in attitudes.

These results contradict the main predictions of theories based around defensiveness, learned attitudes were considerably worse than those of other racialized people.

10. As noted earlier, conservative politicians in Canada made statements that pushed back against discourse challenge Canada's positive self-image after the unmarked graves announcements. In Appendix F.4, I re-run the analyses in Figure 7, except separating White Anglophones into those who support the Conservative Party and those who do not. I find that, if anything, the stronger reversion in attitudes among White Anglophones relative to racialized people and White Francophones is driven by non-Conservatives. This finding suggests that White Anglophones' differential trends in outgroup attitudes cannot be entirely explained by partisan cue-taking.

ing and salience. Instead, the data are more consistent with cognitive dissonance theory. Dominant group members were faced with an incongruence between evidence of injustice and a desire to see their ingroup in a positive light. After the initial shock of novel information about past wrongdoing, people readjusted their beliefs about systemic racism and outgroup deservingness downwards to minimize the threat to their ingroup identity. In support of this interpretation, I show that the attitudes of White Anglophones – a group that is especially attached to a positive conception of Canada – regressed more quickly after discourse around the injustice raised challenging questions about Canada’s self-image.

What might help overcome these barriers and produce durable attitudinal change? As discussed earlier, actionable evidence on this question is limited by the lack of studies investigating the persistence of treatment effects. But given that dominant group defensiveness is thought to arise from socialization processes, a more demanding solution is to undermine national mythologies that minimize past wrongdoing before they take hold. As Murray Sinclair, chair of Canada’s Truth and Reconciliation Commission, argues, “education got us into this mess; education will get us out” (quoted in Slack 2023). In Canada, the news of the unmarked graves did catalyze educational policy changes that could have longer lasting effects on public attitudes. After the events of 2021, several provincial governments announced plans to update their public school curricula to better represent Indigenous peoples and residential schools. The federal government also signalled its intention to revise the citizenship study guide for new immigrants to include more about the history of Indigenous peoples, although progress on this goal has since stalled (El-Sherif 2023). Of course, these are not the transformative, structural reforms that are needed to fully address systemic racism and colonization (Jewell and Mosby 2021). But, if these efforts can provide non-Indigenous Canadians with an unsanitized history of their country, rather than periodically shocking them with evidence of injustice, there may be more constructive debates over policy action in the future.

Two main scope conditions in this study point to directions for future research. First, at the time of the revelations, a majority of Canadians already acknowledged the existence

of systemic racism and perceived high levels of outgroup deservingness. In settings where views of the outgroup are more antagonistic, the positive short-run effects I document may be less likely to occur (e.g. Nyhan and Zeitzoff 2018). Second, the Canadian debate about residential schools was not especially polarized. There were only minor differences in content or tone across media outlets of differing ideologies. While political elites did offer differing interpretations of what the injustices implied about Canadian identity, both left- and right-leaning politicians ostensibly recognized the need for reconciliation.

This lack of heavily polarized messaging may help explain the absence of heterogeneous responses by partisanship, which has been observed in other contexts. Chudy and Jefferson (2021), for example, summarize attitudes towards Black Lives Matter (BLM) after the murder of George Floyd. Despite an initial boost in support for the movement from partisans across the political spectrum, just weeks later Republicans became much less supportive of BLM than they were at the beginning of 2020. Reny and Newman (2021) and Drakulich and Denver (2022) also find widening partisan differences in racial attitudes after George Floyd's death. Revelations of wrongdoing in the distant past can also exhibit heterogeneous responses. The Jedwabne pogrom, which saw the massacre of hundreds of Jews by ethnic Poles in 1941, was effectively unknown until 2000, when the publication of a history book caused a "moral earthquake" in Poland (Wróbel 2006, 387). Compared to Canada, this sudden revelation was followed by a more polarized debate over the country's self-image and the truthfulness of the history (Charnysh 2022; Michlic 2002). Future research would benefit from investigating when evidence of injustice is likely to trigger more versus less similar attitudinal responses across partisan groups. More generally, researchers should strive to link existing theory to how people process information about intergroup relations in their everyday lives, where over time changes and competing issue frames present challenges that are often absent in survey and lab experiments.

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## A. CASE CONTEXT

### A.1 Timeline

Table A1: Timeline of events, 2021 to 2022

Date(s)	Event
May 27, 2021	215 unmarked graves identified at former Kamloops Indian Residential School
May 30, 2021	Prime Minister Trudeau orders Canadian Flags to be flown at half-mast
June 21 to July 9, 2021	Over 15 Christian churches are targets of arson attacks by unknown vandals
June 24 to July 8, 2021	Unmarked graves announced at schools in Marieval (751), Cranbrook (182) and Kuper Island (160)
July 1, 2021	Canada Day celebrations cancelled or scaled back in several regions; counter-celebrations organized by Indigenous activists and allies
August 15 to September 20, 2021	The 44th Canadian federal election campaign results in the re-election of the incumbent Liberal government
September 30, 2021	Canada's first National Day for Truth and Reconciliation is celebrated
January 25 to June 6, 2022	Additional unmarked grave sites identified at seven former residential schools
March 28 to April 1, 2022	Delegation of Indigenous leaders travel to the Vatican to request an official papal apology
July 24 to 30, 2022	Pope Francis visits Canada and apologizes for the Catholic Church's role in the residential school system

Table A2: List of unmarked grave announcements, 2021 to 2022

School	Date	Potential graves	Notes
Kamloops, BC	May 27, 2021	200	Initial announcement of 215 potential graves later revised to 200.
Brandon, MB	June 20, 2021	104	Searches were conducted in 2018 and 2019, but findings weren't widely covered until June 2021.
Marieval, SK	June 24, 2021	751	
Cranbrook, BC	June 30, 2021	182	
Kuper Island, BC	July 12, 2021	160+	
Williams Lake, BC	January 12, 2022	93	
Fort Pelly, SK	February 14, 2022	42	
St. Philip's, SK	February 14, 2022	12	
Grouard, AB	March 1, 2022	169	
Gordon's, SK	April 20, 2022	14	
Blue Quill's, AB	May 17, 2022	Unknown	Local band announced accidental discoveries of human remains believed to be unmarked graves of former residential school students.
Sandy Bay, MB	May 29, 2022	13	No announcement has been made, but the number of potential graves found is listed in media covering the ongoing searches at the school.
Fort Alexander, MB	June 6, 2022	190	

## A.2 Correlates of outgroup attitudes

In Figure A1, I summarize the partial correlation between a variety of covariates and outgroup attitudes before the first unmarked graves were announced (see figure notes for model details). Overall, the model reveals several important patterns. First, partisanship is an important correlate of these beliefs: Conservatives report more than a half standard-deviation worse outgroup attitudes compared to Liberals, and even more compared to other left-wing parties. The size of this difference is comparable to the gap between Indigenous and non-Indigenous people on this issue.

The model also highlights that those who are older, earn more, are men, are distrustful of the media, and live in the West or Atlantic provinces or areas with a larger Indigenous population tend to report worse outgroup attitudes. Finally, while Catholics hold worse outgroup attitudes than non-religious people, their attitudes are not significantly different from other Christians or followers of other religions. That being said, all of the differences described in this paragraph pale in comparison to the huge partisan gap on this question.

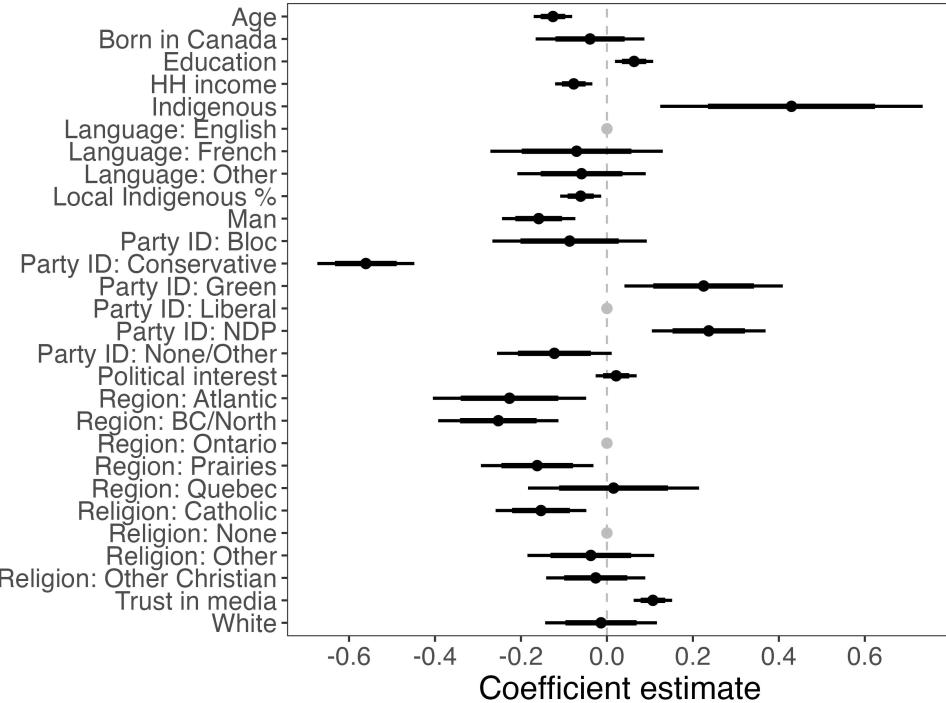


Figure A1: Correlates of outgroup attitudes

Using data from the 2020 and pre-announcement 2021 C-Dem Democracy Checkup surveys, this plot presents coefficient estimates from an OLS model regressing outgroup attitudes on the variables listed on the  $y$ -axis. Bars indicate standard HC2 95% and Bonferroni-adjusted 95% confidence intervals. The scale has been standardized so that estimates imply effects in terms of standard deviation changes, with higher values indicating more favourable attitudes. All explanatory variables are binary except for Age, Education, Political Interest and HH income, which have been standardized such that the coefficient represents an implied effect of a one-standard deviation change. Reference categories for categorical variables are indicated by grey points. ( $n = 4,835$ ).

### A.3 Public mourning after the first announcement

After the first announcement of unmarked graves in Kamloops, Canadians across the country engaged in numerous public acts of mourning. Demonstrations, candlelight vigils, and remembrance walks saw hundreds of people attend in large cities, small towns and Indigenous communities. In many locales, children's shoes were assembled as a memorial to the lives that were lost at residential schools.

To illustrate the magnitude of this public outpouring of grief, I recorded every mention of an event commemorating the deaths of Indigenous children in Canadian cities that occurred in the two weeks after the Kamloops announcement. Figure A2 summarizes the data. Events

were not specific to one region and took place throughout the week as the news gradually became more widely known. In total, I identified almost 90 events in this period, although the true number is likely higher because not all events were described in the media or online.

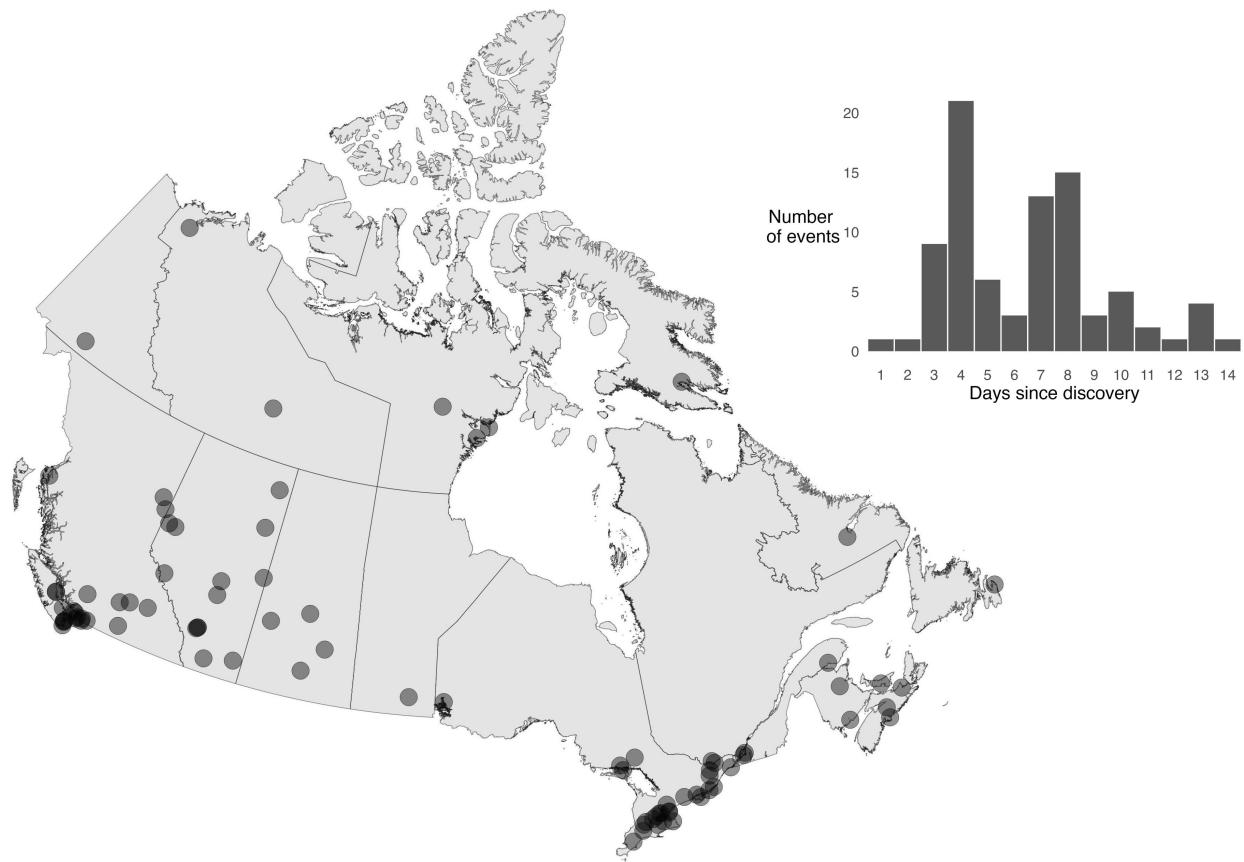


Figure A2: Location and frequency of vigils, May 28 to June 10

## B. MEDIA ANALYSIS

### B.1 Data sources

The media content analysis in this study is based on all articles published in Canada's six largest English-language newspapers and three major regional newspapers between January 1 and December 31, 2021. The estimated political slant of each outlet is presented in Figure A3, according to data from Media Bias/Fact Check.

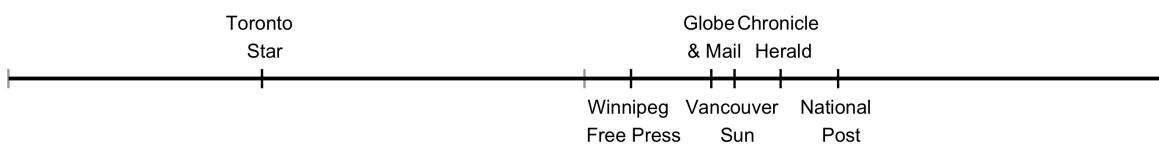


Figure A3: Media source biases

The article data were downloaded as a document-frequency matrix from ProQuest's database, which does not carry French-language Canadian newspapers.

The following pre-processing steps were carried out before estimating topic models:

1. Terms were tokenized into unigrams and converted to lowercase.
2. Stop-words, punctuation, numbers and terms appearing in less than 1% of articles were removed.
3. Articles shorter than 100 words were removed.
4. Duplicate articles were removed in two ways:
  - (a) Duplicate stories appearing in the same outlet on the same date with the same title were removed.
  - (b) A cosine distance matrix was calculated measuring the similarity between each article in the dataset with all other articles. If articles had a cosine similarity score greater than 0.9, a random article among the similar articles was chosen to remain in the dataset and others were removed. This step is necessary because several of the outlets share the same parent company and publish syndicated articles.

After these steps, the corpus comprised 81,544 articles.

## B.2 Residential school topic prevalence during quasi-experiment

Figure A4 presents the proportion of newspaper coverage related to the residential schools topic by survey date during the quasi-experiment. After the initial announcement of suspected unmarked graves was made late in the day on Thursday May 27 on the West Coast, coverage steadily increased over the weekend before jumping on June 1. In Appendix C.2 I re-estimate my main models using this alternative date as the onset of exposure to the residential schools information. Note that none of the stories appearing before May 27 are related to the unmarked graves.

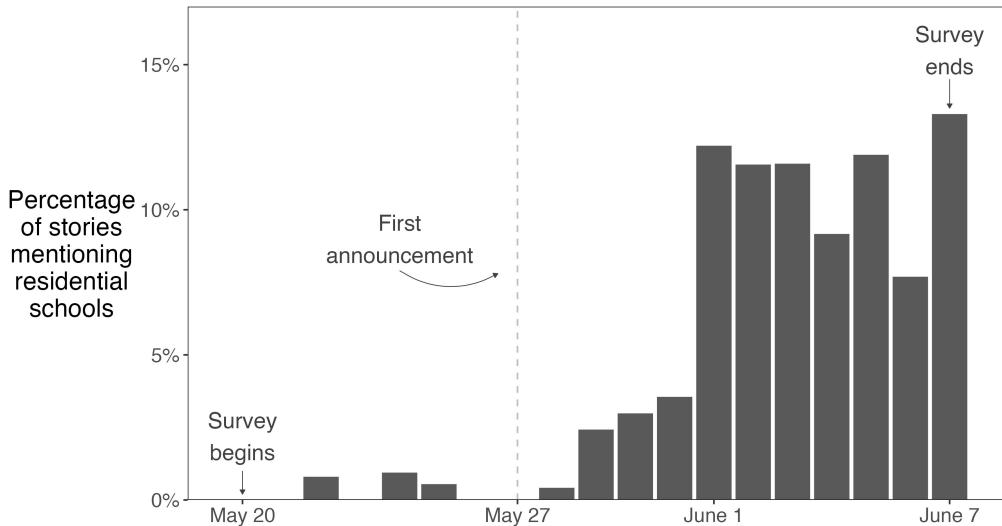


Figure A4: Prevalence of residential school topic during quasi-experiment survey dates  
Plot presents the proportion of news stories in six of Canada’s largest English-language newspapers that contain the term “residential school(s)” during the May 2021 survey.

## B.3 Topic modelling media coverage

As an alternative to the analysis based on term frequency in the main text, I train a Latent Dirichlet Allocation (LDA) topic model. The model is estimated for 250 topics, which was chosen for its ability to consistently identify a “residential schools” topic that is distinct from a more general Indigenous topic. (Figure A5 plots the terms most associated with the residential school topic, alongside the general Indigenous topic for comparison.)

Figure A6 summarizes the prevalence of the residential school topic over the course of 2021. The patterns over time are broadly consistent with the main results using term frequency.

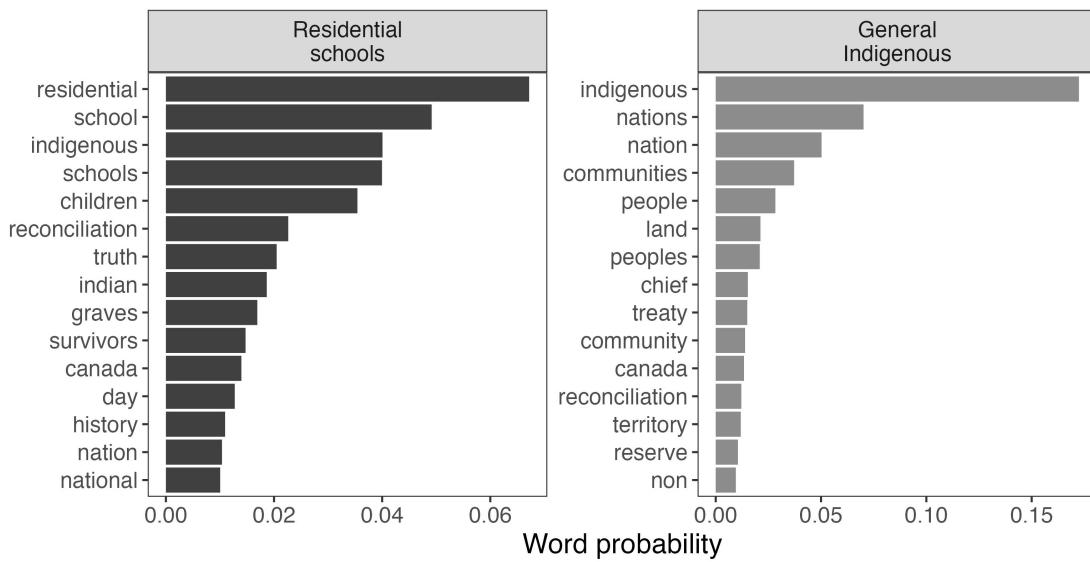


Figure A5: Terms most associated with Indigenous topics in LDA model estimates

Plot presents the fifteen terms that are most associated with the residential schools and general Indigenous topics in the LDA model along with their word probabilities for those topics.

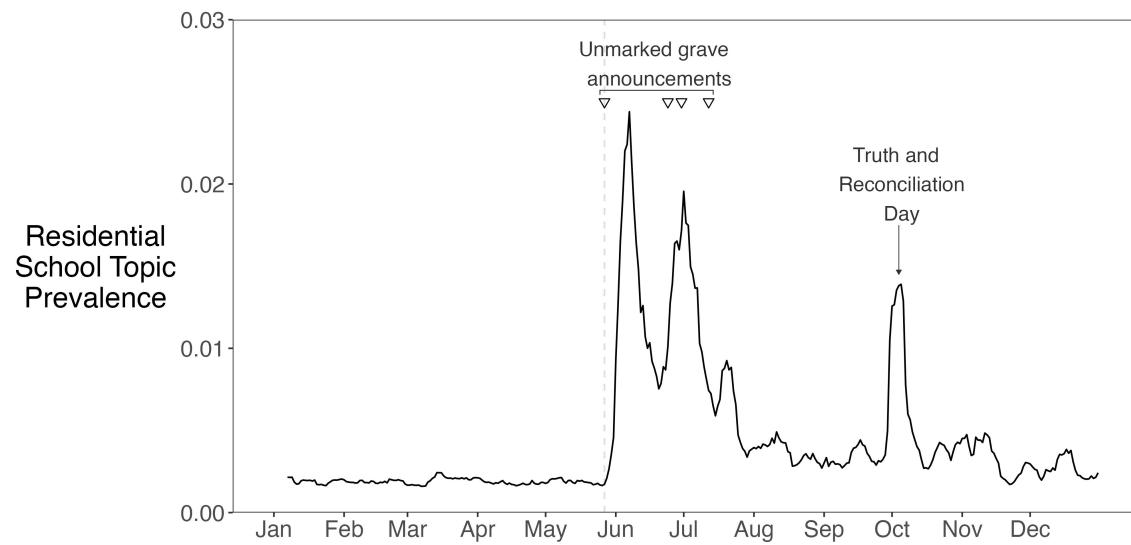


Figure A6: Prevalence of residential school topic in Canadian newspapers, 2021

Plot presents a 7-day rolling average of the residential schools topic prevalence estimated from an LDA topic model on the full-text of every news story in six of Canada's largest English-language newspapers.

#### B.4 Residential schools and unmarked graves media coverage, 2000 to 2022

In the main text, I focus on the prevalence of coverage related to residential schools during 2021. To look at a longer time horizon, I assembled a separate corpus of every article published in Canada's three largest English-language newspapers between 2000 and 2022.

Figure A7 charts the percentage of news stories each month that mention the phrase "residential school(s)." The plot reveals that Canadians were exposed to the residential school history more intensely after the unmarked grave announcements than at any point in the previous two decades. While coverage increased after the TRC issued its final report in 2015, no other period comes close to the volume of articles referencing this history in the summer of 2021.

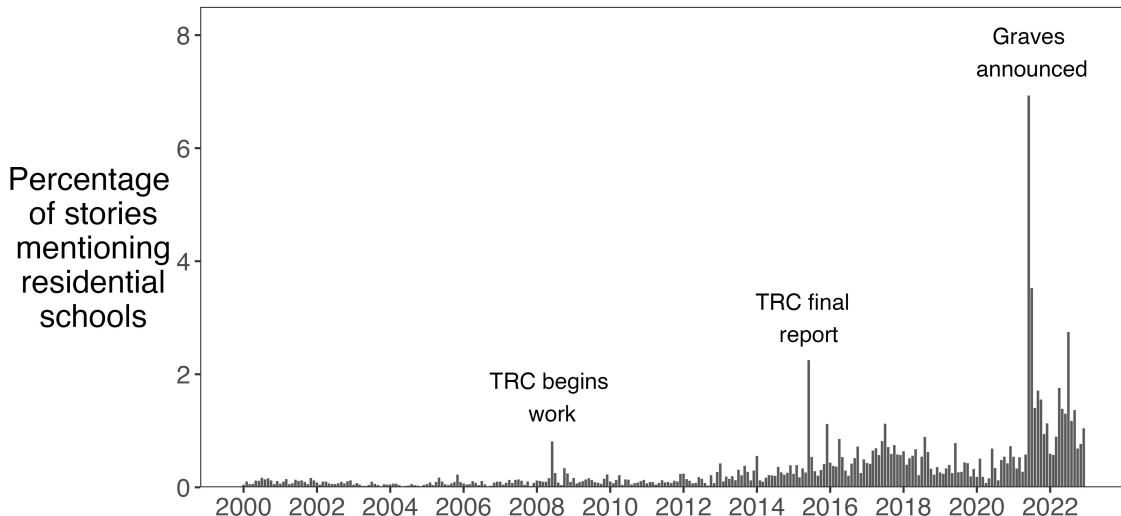


Figure A7: Percentage of newspaper stories mentioning residential schools, 2000 to 2022  
Plot presents the percentage of all new stories that mention "residential school(s)" in the *Globe and Mail*, *National Post* and *Toronto Star* by month.

That being said, Figure A7 does show that the residential school history was covered to some degree before the events of 2021. However, the news about unmarked graves represented an entirely new dimension to the story, of which most Canadians were unaware. While the Truth and Reconciliation Commission signalled that graves likely existed at former schools and recommended further action to identify and protect these sites (i.e. Calls to Action 73 to

76), this information did not appear much in the media before 2021. In Figure A8, I count the number of articles each year that include the words “graves” and “residential school(s)” together in Canada’s largest English-language newspapers. Before 2021, there were essentially no articles discussing this topic, while that number increases dramatically after the Kamloops announcement. Moreover, many of the grave-related residential school articles before 2021 are likely false positives. I hand-coded 20 of the pre-2021 articles mentioning these two terms together and only three of them actually had to do with burials at the schools, while many were accidentally flagged because of phrases like “grave doubts.”

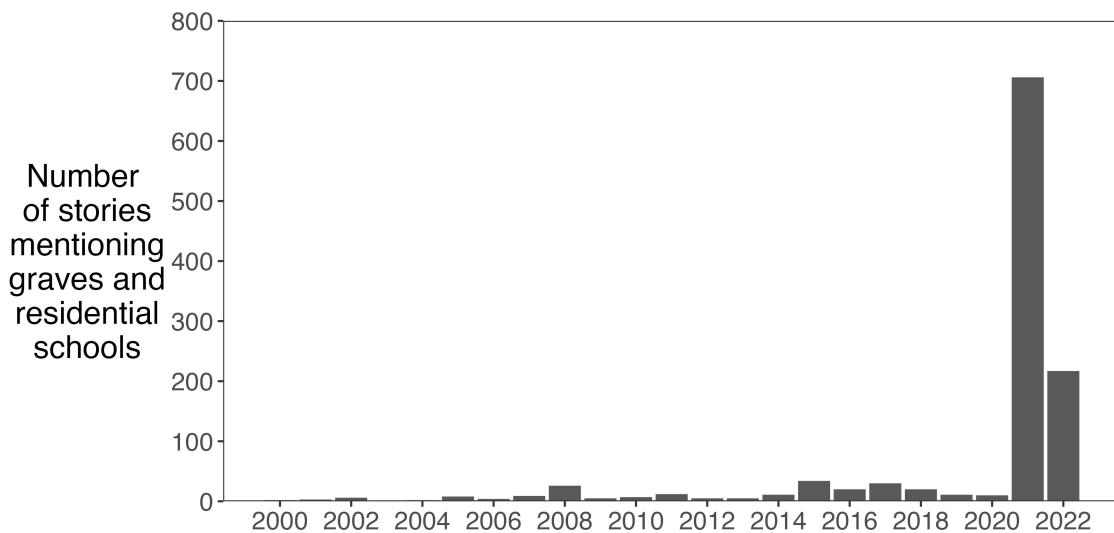


Figure A8: Number of articles mentioning “graves” and “residential schools,” 2000 to 2022  
Plot presents the number of all new stories that mention “residential school(s)” and “grave(s)” in the *Globe and Mail*, *National Post* and *Toronto Star* by year.

## C. QUASI-EXPERIMENT

### C.1 Balance checks

The fundamental assumption in my analysis of public opinion after the first unmarked graves announcement is that those who were surveyed just before the announcement are similar on average to those surveyed immediately afterwards. To test this assumption, I first compare the means on a host of presumably stable covariates in Table A3. Overall, those in the pre- and post-announcement samples are remarkably similar on these observable dimensions, except those surveyed after the first announcement are about two years younger and have 0.4% fewer Indigenous people living in their electoral district.

I also conduct a separate check by regressing an indicator for being surveyed after the announcement on the same set of covariates to test whether the differences persist after conditioning on other possible sample differences. The standardized coefficient estimates predicting post-announcement status are summarized in Figure A9. The results in this test are qualitatively similar: few variables exhibit meaningful differences between the two samples. Only respondent age and the local Indigenous population percentage are statistically distinguishable from zero and even in those cases, the magnitudes are small: a one standard deviation increase in age and the local Indigenous percentage is associated with a 3 and 2 p.p. lower likelihood of being treated, respectively. The only other notably large coefficients are those associated with speaking French, living in Quebec and supporting the Bloc Québécois, but collinearity among these variables may be inflating the estimates given the balance reported in Table A3. Overall, these analyses suggest there are few discrepancies between the pre- and post-announcement samples and that they are small in size. Nonetheless, I control for all variables reported here in the ATE estimation.

Table A3: Sample characteristics by treatment status

	Average		
	Pre-announcement	Post-announcement	Difference
Man	0.50	0.47	0.03
Age	50.8	48.8	2.00*
White	0.80	0.79	0.01
Bachelor's degree	0.43	0.42	0.01
Household income	\$79,474	\$81,013	\$1,539
Catholic	0.28	0.29	0.01
Other Christian	0.23	0.23	0.00
Not religious	0.39	0.38	0.01
Born in Canada	0.80	0.81	0.01
Political interest (0 to 10)	6.46	6.34	0.12
Region: Ontario	0.39	0.41	0.02
Region: Quebec	0.26	0.25	0.01
Region: BC	0.10	0.11	0.01
Region: Atlantic	0.06	0.07	0.01
Local Indigenous %	0.04	0.04	0.00*
French-speaker	0.24	0.25	0.01
Party ID: Bloc	0.07	0.09	0.02
Party ID: Conservative	0.23	0.23	0.00
Party ID: Liberal	0.33	0.32	0.01
Party ID: NDP	0.14	0.14	0.00
Party ID: None/Other	0.22	0.23	0.01

\*p<0.05 in *t*-test for difference-in-means.

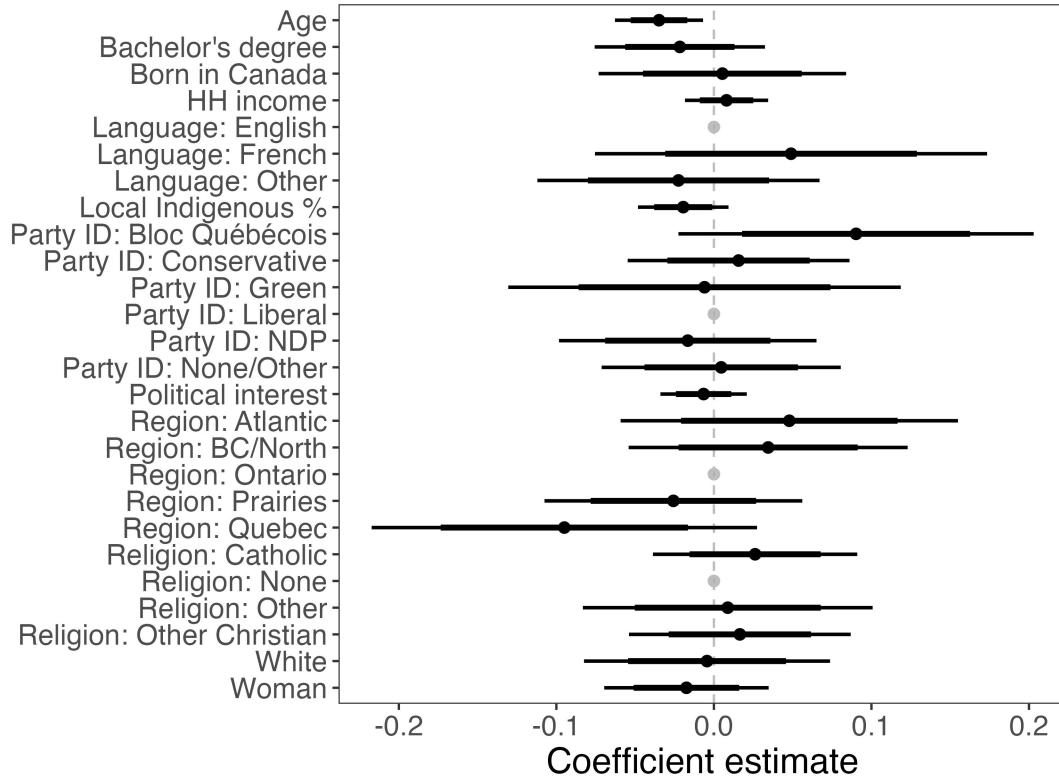


Figure A9: Quasi-experimental balance test

Plot presents coefficient estimates from an OLS model regressing treatment status on the variables listed on the *y*-axis. Bars indicate standard HC2 95% and Bonferroni-adjusted 95% confidence intervals. All variables are binary except for Age, Political Interest and HH income, which have been standardized such that the coefficient represents the implied effect of a one-standard deviation change. Reference categories for categorical variables are identified by grey points. ( $n = 3,756$ )

## C.2 Outgroup attitudes by survey date

Figure A10 charts the average agreement with the outgroup attitudes items by survey date. After the initial announcement on May 27, agreement trends steadily upward as the story became more widely known.

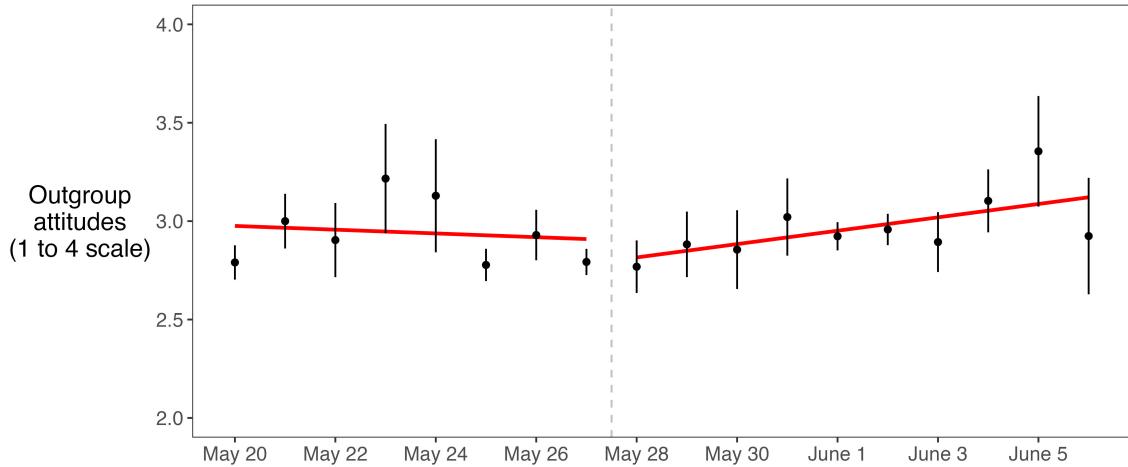


Figure A10: Outgroup attitudes by survey date

Plot presents mean and 95% confidence intervals for average outgroup attitudes among respondents each day the survey was in the field, with higher values indicating more favourable attitudes. Note: the final survey date on June 7 included 4 responses that were combined into the June 6 point in the plot for readability.

Partly this is because the news was first reported late on a Thursday on the west coast. Media did not begin covering the story intensely until after the weekend, mostly beginning on June 1 (see Appendix B.2). In Table A4, I re-estimate the models from the quasi-experiment using this date as the first true day of exposure to the story. Under this specification, the effects of being surveyed after the announcement became widely covered in the media are around 15 to 20% larger than the estimates reported in the main text.

Table A4: Effects of unmarked graves news using alternative exposure date

	Outgroup attitudes	
Surveyed after May 31	0.136*	0.116*
	(0.034)	(0.031)
Observations	3,849	3,752
Controls	No	Yes
R <sup>2</sup>	0.004	0.196

Coefficients are expressed in terms of pre-announcement standard deviations. In model 2, the following covariates are included but not reported: gender, born in Canada, education, household income, party ID, political interest, religion, language, White, electoral district Indigenous percentage, province, and birth-decade fixed effects. \*p<0.05

### C.3 Evaluating pre-announcement time trends

A fundamental assumption supporting the identification of causal effects of the initial announcement is that some other time-varying confounder was not simultaneous changing over the course of the study period (Muñoz, Falcó-Gimeno, and Hernández 2020). For example, if there was a positive, secular trend in attitudes toward Indigenous peoples during the survey dates, the effects of being surveyed after the announcement might not be driven by the announcement itself.

This explanation is implausible for two reasons. For one, as Figure A10 shows, there is no distinct correlation between time and attitudes in the pre-announcement period. Another way to rule out temporal trends is to re-estimate the main models using placebo dates for treatment onset. If the sudden exposure to the relevant information truly triggered a discontinuous shift in attitudes, and not merely a continuation of prior attitudinal trends, then the estimated effects using pre-announcement dates should be small and insignificant.

Figure A11 summarizes the results of such an analysis. Each point and confidence interval

in the plot comes from a separate model in which outgroup attitudes are regressed on an indicator for whether a respondent was surveyed on or after each date listed on the  $x$ -axis. As expected, none of the placebo dates to the left of the unmarked graves announcement (marked by the red vertical line) are substantively or statistically significant. The true date of treatment onset, and all subsequent dates, exhibit the expected pattern.

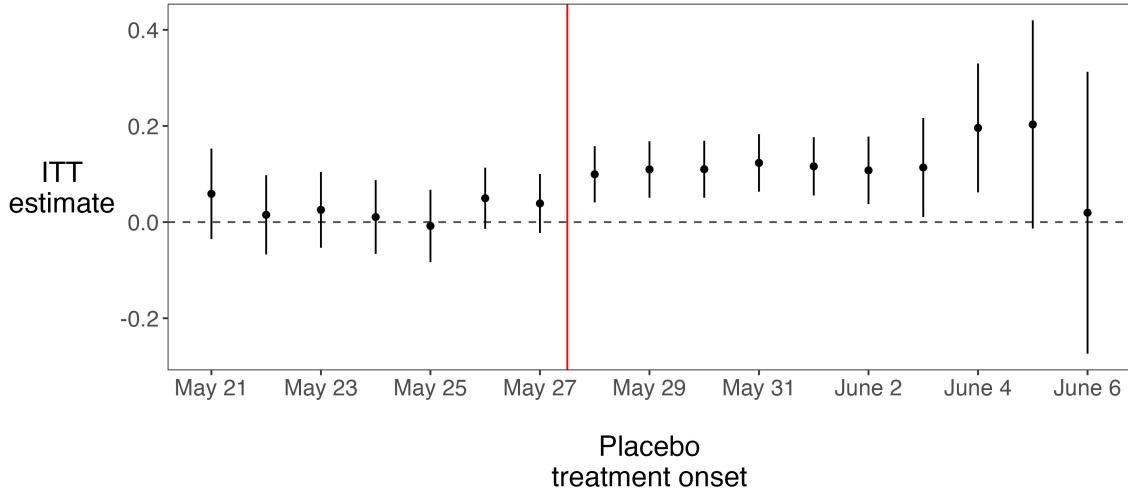


Figure A11: ITT estimates using placebo treatment onset dates

Plot summarizes models in which outgroup attitudes are regressed on an indicator for whether a respondent was surveyed on or after each date listed on the  $x$ -axis. Each point represents the estimated treatment effect and associated 95% confidence interval. The vertical red line indicates the actual treatment onset; dates to the left of this line represent placebo treatment onsets. Models control for the following covariates: age, gender, White, born in Canada, region, religion, party ID, household income, language, education and political interest.

Finally, a note about the null effects of the estimate for being surveyed on or after May 27, the actual date of the announcement. To the best of my knowledge, the report of unmarked graves was first covered by the media at 7pm EST on this day. Of the 686 respondents on May 27, only 17% completed their surveys after the story was first reported. For this reason, I treat May 28 as the first day of true exposure in the main text (see also the discussion of media coverage during the study period in Appendix B.2).

#### C.4 Effects on individual survey items

Table A5: Unmarked graves announcement and individual outgroup attitudes items

	Outgroup attitudes			
	Systemic racism		Deservingness	
Surveyed after graves announcement	0.105*	0.094*	0.104*	0.089*
	(0.032)	(0.030)	(0.032)	(0.031)
Observations	3,852	3,755	3,850	3,753
Controls	No	Yes	No	Yes
R <sup>2</sup>	0.003	0.175	0.003	0.166

Coefficients are expressed in terms of pre-announcement standard deviations. In models 2 and 4, the following covariates are included but not reported: gender, born in Canada, education, household income, party ID, political interest, religion, language, White, electoral district Indigenous percentage, province, and birth-decade fixed effects. \*p<0.05

#### C.5 Heterogeneous responses

One of the strongest predictors of non-Indigenous Canadians' outgroup attitudes is partisanship (see Figure A1). Moreover, this variable has proven an important determinant of how individuals respond to information related to racism in the American context (e.g. Chudy and Jefferson 2021; Fang and White 2022; Reny and Newman 2021). For these reasons, we might expect that supporters of different political parties may have different responses to news about unmarked graves.

To investigate whether the effects of the grave announcement differ by partisanship, I estimate conditional average treatment effects (CATEs) by interacting party identification with the post-announcement dummy in the specification from Table 1 in the main text. The results, summarized in Figure A12, indicate that there are no substantively meaningful or statistically significant differences in treatment effects across partisan categories. There is also no evidence of a backlash effect for any subgroup: the announcement improved outgroup attitudes for partisans of all stripes. The only notable heterogeneity is the essentially null

CATEs among supporters of minor parties and nonpartisans. In the analysis below, I show that this pattern is unlikely to be driven by differences in political interest.

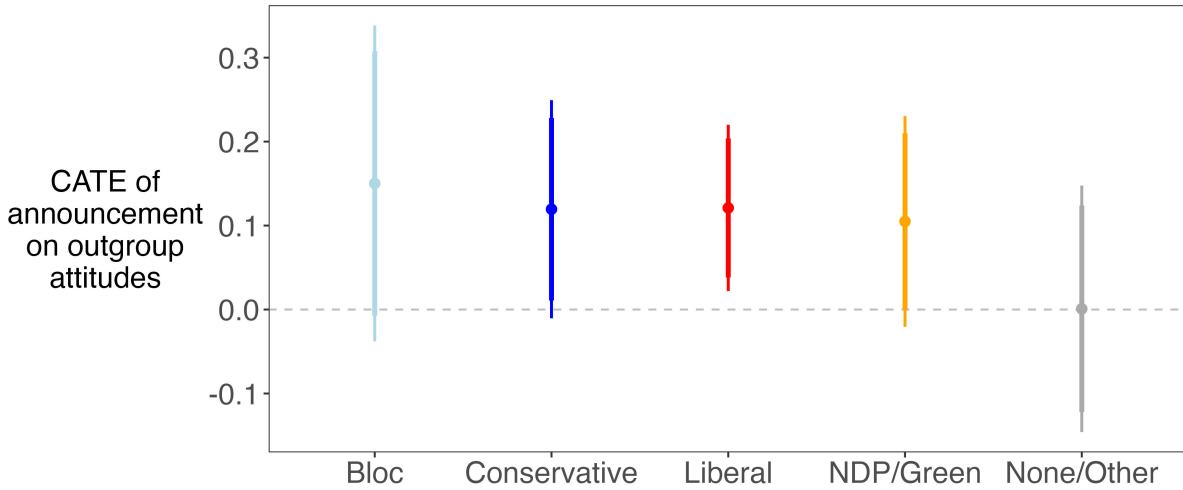


Figure A12: Effects of unmarked graves announcement by Party ID

Plot presents CATE estimates from an OLS model interacting treatment status (i.e. being surveyed after the first unmarked graves announcement) with Party ID. Coefficients are expressed in terms of pre-announcement standard deviations. Model controls for gender, born in Canada, Bachelor's degree, log household income, party ID, turnout in 2019, Christian, language, White, electoral district Indigenous percentage, province, and birth-decade fixed effects. Bars indicate 90 and 95% HC2 confidence intervals. ( $n = 3,643$ ).

The analysis in Figure A12 investigates heterogeneity in response to the unmarked graves news with respect to partisan identities. Yet there are numerous other subgroups that might be expected to be more or less affected by the news: White people, older people, those with less interest in the news, Catholics, immigrants and so on. I take a data-driven approach to identifying these kinds of heterogeneous treatment effects among various subgroups by training an honest causal forest (Athey and Wager 2019; Wager and Athey 2018). Causal forests are an ensemble method based on aggregating individual tree-based models that recursively partition a “splitting” sample of the data along covariate values in order to maximize treatment effect variation within each leaf (partition of the data). Treatment effects,  $\hat{\tau}_i$ , are then estimated for each observation in a separate “estimation” sample of the data by assigning the mean differences in outcomes between treated and control observations within each leaf.

Figure A13 summarizes the relationships between these estimated individual-level treat-

ment effects (on the  $y$ -axis) and several pre-treatment covariates. There are a few noteworthy patterns. First, in line with the results in Section ??, there is little difference in treatment effects by partisanship. Second, the most notable heterogeneity can be seen with respect to the percentage of Indigenous people living in one's local electoral district: the unmarked graves produced essentially no effect on structural racism attitudes among non-Indigenous respondents living in districts where Indigenous people made up more than 10% of the population. In fact, this variable the most important splitting criterion in the causal forest. Third, there is no consistent evidence in the second row that the news of the unmarked graves had more positive effects on outgroup attitudes among those who likely had less exposure to information about residential schools. Estimated CATEs are roughly the same across different amounts of political interest, knowledge and engagement with the news; in the case of general education, those who are better educated even saw slightly larger effects, but the differences are not substantial. Finally, it is also the case that men, White people and those that live in the Prairies updated their views toward the outgroup less after the news broke.

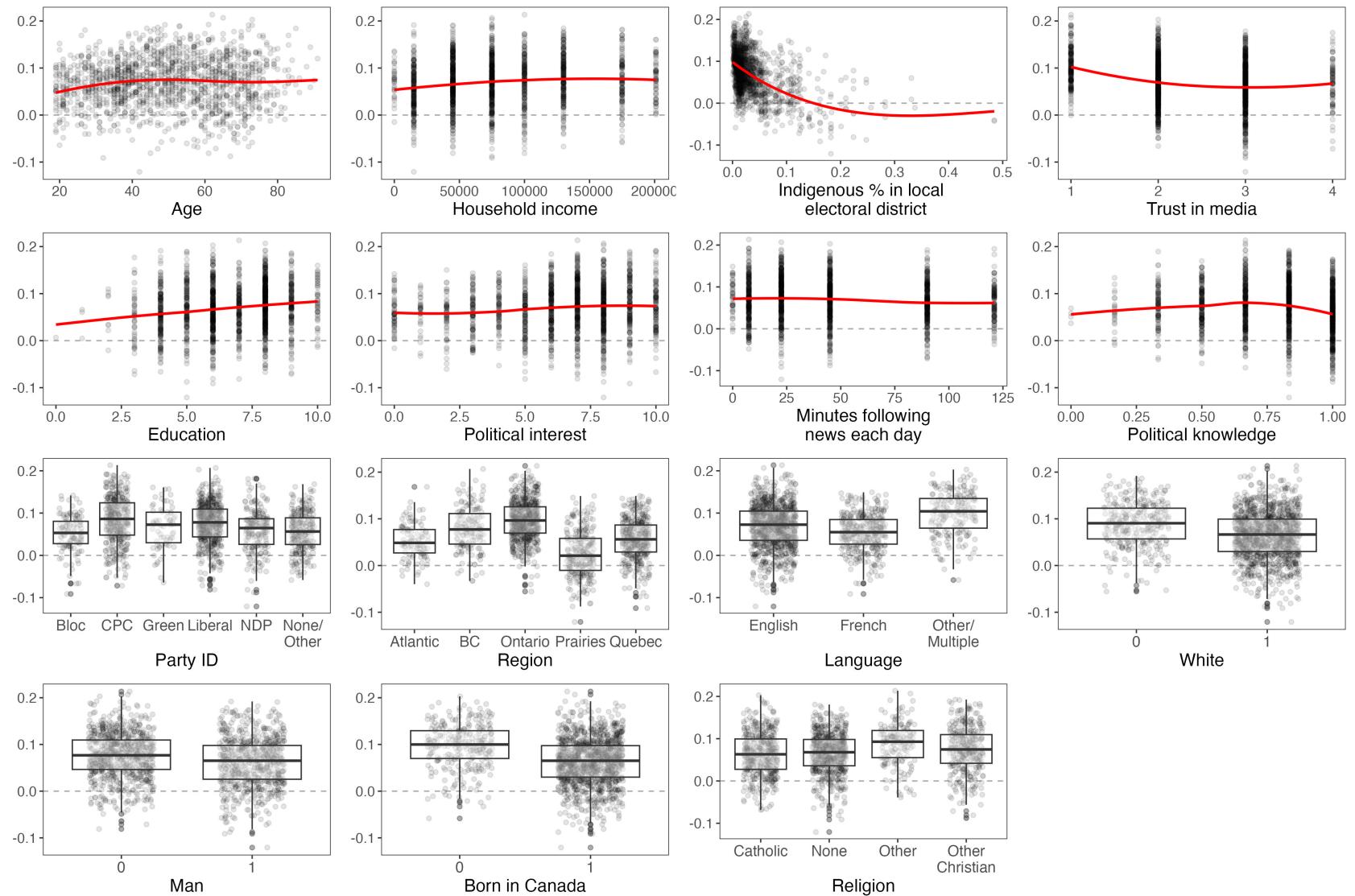


Figure A13: Causal forest estimated treatment effects and respondent characteristics

Plot summarizes the bivariate relationships between covariates and the estimated treatment effects ( $\hat{\tau}$ ) for each observation in the test dataset. The  $y$ -axis in each plot is the estimated treatment effect.

Overall, the magnitude of the differences in Figure A13 is quite small. There is actually little variability across units in response to the news of the unmarked graves. Figure A14 summarizes the individual-level estimated treatment effects and their variability. Most  $\hat{\tau}$  values fall within 0 to 0.2 s.d. and there is a fair degree of uncertainty around these estimates. Perhaps most importantly, 90% of all observations were estimated to have a positive treatment effect, meaning there is little evidence of backlash among particular subgroups.

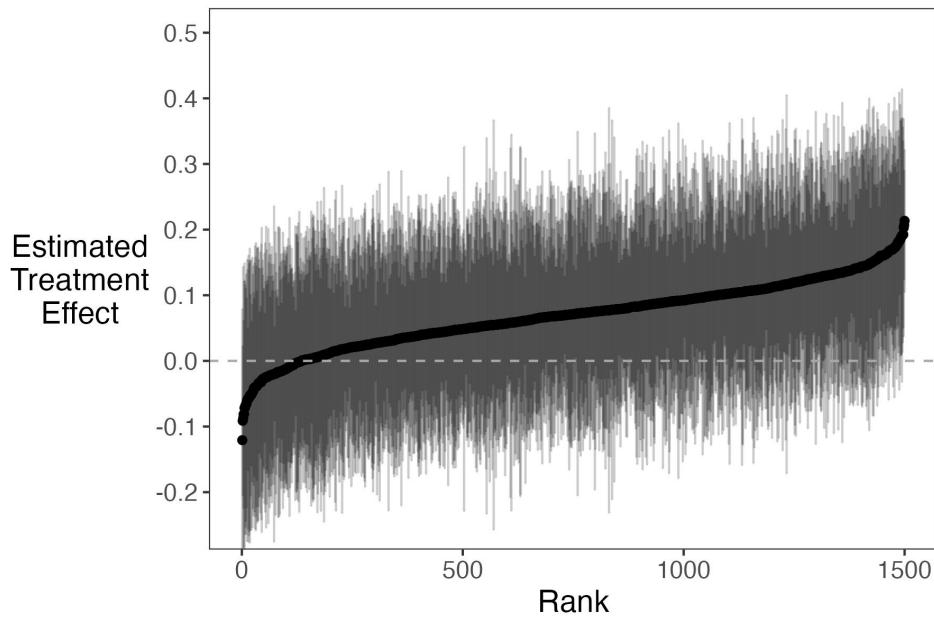


Figure A14: Causal forest estimated treatment effects

Plot presents the estimated treatment effect ( $\hat{\tau}$ ) for each observation in the test dataset, ranked by their  $\hat{\tau}$  values.

Finally, the bivariate plots earlier ignore correlations among covariates and do not capture estimation uncertainty. An alternative summary CATE measure is the best linear projection (BLP), a doubly robust estimate of the following linear model:

$$\tau(\mathbf{X}_i) = \alpha + \mathbf{X}_i\beta$$

where  $\tau(\mathbf{X}_i)$  is the CATE and  $\mathbf{X}_i$  is a vector of covariates. Of course, this modelling approach assumes linearity between the CATEs and covariates, which may not be strictly true given the relationships in Figure A13, but it does offer a useful starting point for characterizing effect

heterogeneity.

Figure A15 summarizes the coefficients from the BLP. Most of the patterns in the bivariate plots hold up in this analysis: while there is not a significant amount of effect heterogeneity, some subgroups do exhibit marginally different responses to the treatment. For example, women were more affected by the news, but none of the measures of political awareness exhibit a significant association with effect sizes.

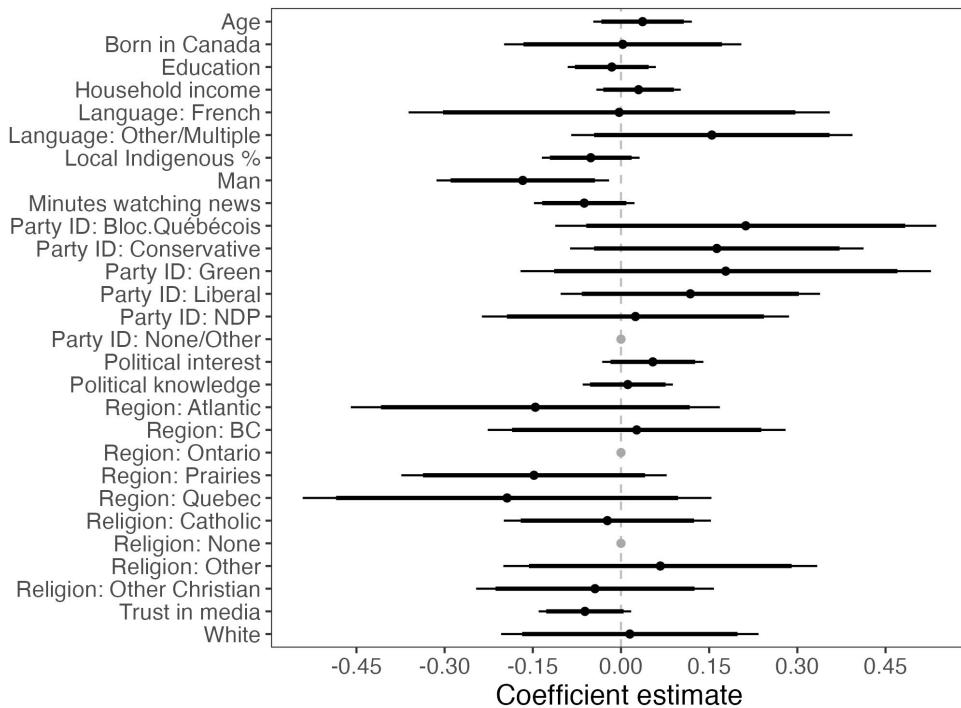


Figure A15: Best linear projection for causal forest estimated treatment effects

Plot presents the coefficient estimates from a best linear projection of the CATEs on covariates listed in the  $y$ -axis. The outcome variable is the estimated treatment effect,  $\hat{\tau}$ . All covariates are categorical except age, education, household income, minutes watching news and trust in media, which have all been standardized to represent implied effects in terms of standard deviation changes. ( $n = 2,251$ ).

## D. OVER-TIME ANALYSES

### D.1 Sample details

In investigating attitudinal persistence, I rely on responses to the Indigenous resentment items in the 2019, 2020, 2021, 2022 and 2023 C-Dem Democracy Checkup surveys and the 2021 Canadian Election Study ( $n=4,877; 7,986; 3,853; 7,444; 7,712$ ; and 18,374, respectively).

The sampling strategy is nearly identical in all four surveys, relying on online recruitment and quotas for age, gender, province and language (in Quebec), based on the 2016 and 2021 Canadian censuses. In the 2021 CES, the data includes “oversampled” responses that collected overflow responses from full quotas and in the 2022 Democracy Checkup, an oversample of Quebec respondents was conducted; I exclude both sets of oversample responses in my analyses. Respondents needed to be 18 years of age or older, and Canadian citizens or permanent residents to participate. In all analyses, responses are unweighted.

One noteworthy change in sampling is that for the 2019 and 2020 surveys, C-Dem contracted with Dynata to recruit respondents, while Leger is used from 2021 onwards. The overall favourability of outgroup attitudes is lower in the Dynata samples, although this is confounded by time. Importantly, the main pattern of interest — a short-term decrease in resentment in the 2021 Democracy Checkup followed by an increase in the resentment months later in the 2021 CES — is observable strictly within the surveys fielded by Leger. These facts help ameliorate any concerns that the over time trends I observe are due to changes in sample characteristics, although I investigate this possibility in more detail below.

## D.2 Changes in sample composition over time

One explanation for the changes we observe in outgroup attitudes over the last few years — and in particular the reversion in attitudes after the unmarked graves announcements in 2021 — is that the samples of respondents are changing rather than just their reported attitudes. However, the survey is a general omnibus political attitudes poll, not one focused exclusively on intergroup attitudes, so it unlikely that there would be response bias specifically on this issue after the unmarked graves announcements. Nonetheless, to evaluate the extent of changing sample characteristics, I estimate a multinomial logistic regression where the outcome is a categorical variable indicating the survey wave a respondent belongs to and the predictor variables are demographic characteristics. If there are no differences in respondent characteristics across survey waves, the variables should not predict the survey that each

respondent comes from. Note that in the Summer 2019 survey, there is no question that identified respondents' race, so this survey is not used in the analyses here. As the plot in the main text showed, however, there was little change in respondents' attitudes between 2019 and 2020.

Table A6 summarizes the model; note that the reference category for the outcome variable is the May 2021 (the field dates of which included the first unmarked graves announcement). The coefficient estimates represent the change in log odds of appearing in the survey in the columns relative to the May 2021 survey given a unit change in the predictor variables while all other predictors are held constant. The model reveals some notable changes between survey waves: for example, respondents generally became older over each successive wave and, relative to those in the May 2021 survey, those in later surveys were more likely to be born in Canada, have higher incomes, and less likely to be White.

Given these relevant differences in sample characteristics, I attempt to control for all changes over time in respondents' observable characteristics. Specifically, I estimate an OLS model predicting outgroup attitudes across all survey waves (except 2019; see above) based on the variables in Table A6 and then summarize the model residuals across each survey. Figure A16 presents the results. This plot captures average outgroup attitudes in each survey after partialing out observable variables. Note that larger residuals indicate a more favourable level of outgroup attitudes than would have been predicted by all of the time-invariant pre-treatment covariates. Encouragingly, the plot shows the same pattern as the raw scores in the main analysis: views of the outgroup improve after the initial unmarked graves announcements (marked by a dashed vertical line), but return to baseline levels in the later surveys. These results suggest that the reversion in attitudes is not driven simply by a change in sample characteristics over time.

Table A6: Predicting sample membership  
from respondent characteristics

	Survey wave (Reference category is May 2021)			
	May 2020	September 2021	May 2022	May 2023
Age	-0.086* (0.022)	0.207* (0.020)	0.064 (0.022)	0.110* (0.022)
Man	0.085 (0.044)	-0.086 (0.039)	-0.068 (0.043)	-0.065 (0.042)
Born in Canada	0.074 (0.063)	0.761* (0.057)	0.200* (0.061)	0.099 (0.061)
Region: BC/North	0.273 (0.103)	-0.012 (0.093)	0.289 (0.101)	0.253 (0.100)
Region: Ontario	0.003 (0.089)	-0.210 (0.080)	0.038 (0.088)	-0.010 (0.087)
Region: Prairies	-0.010 (0.098)	-0.019 (0.088)	0.069 (0.096)	0.001 (0.096)
Region: Quebec	-0.254 (0.121)	0.084 (0.106)	-0.186 (0.119)	-0.106 (0.118)
Religion: None	-0.101 (0.054)	0.117 (0.048)	0.175* (0.053)	0.264* (0.053)
Religion: Other	-0.022 (0.081)	0.055 (0.073)	0.091 (0.079)	0.275* (0.078)
Religion: Other Christian	-0.068 (0.063)	-0.012 (0.056)	-0.062 (0.062)	-0.025 (0.062)
Party ID: Conservative	0.102 (0.099)	0.044 (0.086)	0.189 (0.098)	0.034 (0.096)
Party ID: Green	0.061 (0.128)	-0.461* (0.117)	-0.191 (0.131)	-0.304 (0.129)
Party ID: Liberal	0.035 (0.094)	-0.077 (0.081)	0.005 (0.093)	-0.169 (0.091)
Party ID: NDP	-0.168 (0.106)	0.153 (0.091)	0.304 (0.102)	0.138 (0.101)
Party ID: None/Other	-0.211 (0.103)	-0.370* (0.089)	0.260 (0.099)	0.128 (0.097)
Household income	0.007 (0.021)	0.068* (0.019)	0.084* (0.021)	0.120* (0.020)
Local Indigenous %	0.015 (0.023)	0.036 (0.020)	0.020 (0.022)	0.009 (0.022)
Education	-0.047 (0.022)	0.045 (0.020)	-0.026 (0.022)	-0.054 (0.022)
Political interest	0.071* (0.023)	0.006 (0.020)	-0.023 (0.022)	-0.047 (0.022)
White	0.078 (0.062)	-0.166 (0.055)	-0.202* (0.059)	-0.186* (0.059)
Language: French	0.119 (0.098)	0.117 (0.086)	0.214 (0.096)	0.084 (0.096)
Language: Other/Multiple	-0.080 (0.074)	1.212* (0.063)	-0.053 (0.071)	-0.212 (0.072)
Akaike Inf. Crit.	118,302.200			

\*Bonferroni-adjusted p<0.05

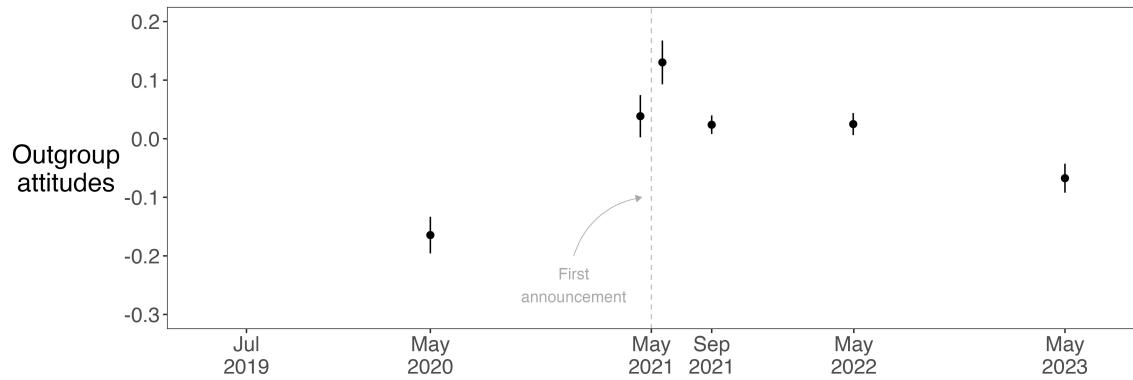


Figure A16: Residualized outgroup attitudes, 2019 to 2023

Plot presents average and 95% confidence intervals for respondents' residualized outgroup attitude scores in each survey wave. Residuals calculated from an OLS model including the following predictors: age, gender, White, born in Canada, region, religion, party ID, household income, language, education and political interest. The vertical dashed line indicates the initial announcement of unmarked graves in 2021.

### D.3 Outgroup attitudes items separately over time

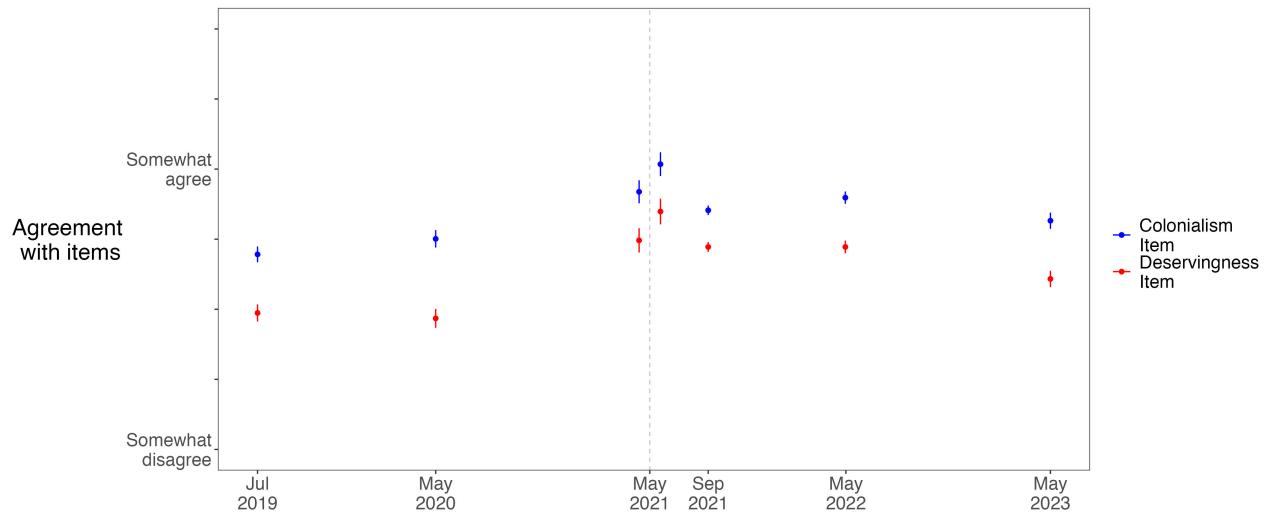


Figure A17: Outgroup attitudes, 2019 to 2023

Plot presents average and 95% confidence intervals for the mean for each of the two items measuring outgroup attitudes. In all but the September 2021 survey, this question was asked on a four-point Likert scale. For that specific survey, a five-point scale was used, but responses have been rescaled to match the four-point scale (see Appendix Figure A18 for individual response level prevalence over time).

#### D.4 Response-level frequency over time

The over time comparisons in the main text rely on five different surveys. In all but one of those surveys, the items asking about agreement with the outgroup attitudes items are measured on a four-point scale. In the main text, responses from the only survey using a five-point scale (the September 2021 survey) are rescaled to match the other years' data.

In Figure A18, I show that the same substantive conclusions can still be drawn without re-scaling the data. The two plots present that proportion of respondents answering with each response level to each outgroup attitudes item in each survey wave. When the grave announcement was first made (indicated by the gray dashed line), all response categories became less prevalent except for the one that indicated strong agreement with the two items. In the September 2021 survey, we again see nearly all response categories becoming less prevalent, but this time because a “neutral” option has been introduced. That being said, more respondents sorted out of the “strongly agree” option than the “strongly disagree” option between the two 2021 waves, indicating a reversion in attitudes. Finally, when the “neutral” option is again removed in 2022, we do not see many respondents returning to a “strongly agree” position, suggesting possibly that attitudes stabilized after 2021.

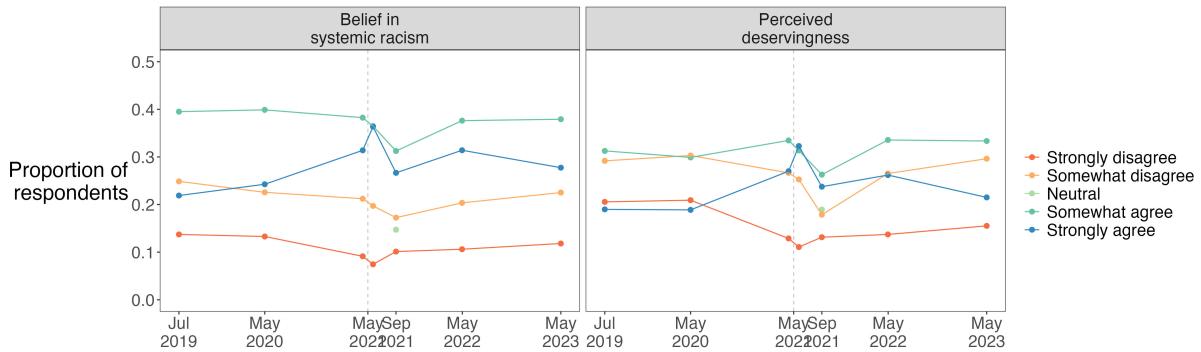


Figure A18: Outgroup attitudes by response level, 2019 to 2023

Plot presents the proportion of respondents offering each response level to the two outgroup attitudes items in each survey wave. The colour scale has been defined so that higher values indicate more favourable outgroup attitudes. Except for the September 2021 survey, these items was asked on a four-point Likert scale.

## D.5 Indigenous feeling thermometer over time

The main analyses in this study focus on outgroup attitudes. In Figure A19 I instead look at a measure of affective attitudes toward Indigenous people over time: non-Indigenous people's average responses when asked to rate how they feel about Indigenous peoples on a scale from 0 to 100, with larger values indicating more positive views. While this plot only allows for a descriptive look at attitudes over time, one pattern worth noting is that the average score in 2021 after the grave announcements does not appear to be much different than responses among online respondents since 2015. There is no increase in favourable attitudes as a result of the revelation of historical injustices, further corroborating the main analyses' finding of little long-term attitudinal change.

This data also reveals an important mode effect. In 2015, the Canadian Election Study was fielded both online and over the phone. Those completing the survey online rated Indigenous peoples nearly 11 points lower on the feeling thermometer than those who spoke to an enumerator over the phone ( $p < 0.001$ ). These results suggest that online surveying may be significantly reducing respondent incentives to provide socially desirable responses (see Breton et al. 2017).

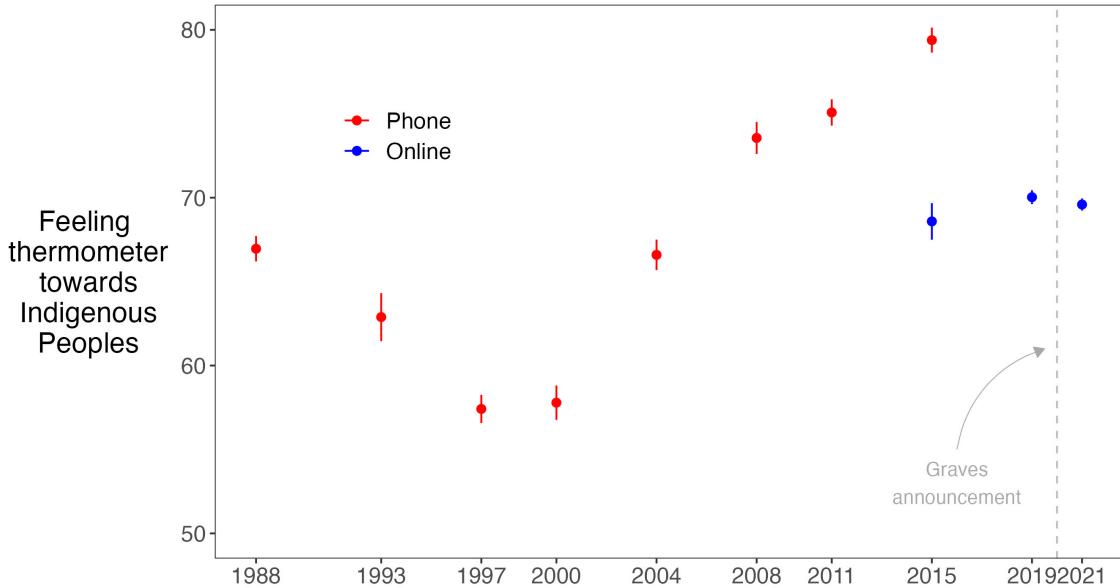


Figure A19: Feeling thermometer toward Indigenous peoples, 1988 to 2021

Plot presents the average and 95% confidence intervals for the feeling thermometer score in each survey year. The specific language of the item changed over time: respondents gave their feelings towards “Native peoples” in 1988, “Aboriginal peoples” from 1993 to 2015, and “Indigenous peoples” from 2019 onwards. In 2019, point represents the pooled average within two surveys: the Canadian Election Study and the Democracy Checkup.

## D.6 George Floyd Murder and attitudes toward racial minorities

In the main text, I discuss the murder of George Floyd in the United States and the subsequent protests that occurred both in that country and in Canada as one possible explanation for the improvement in respondents’ attitudes toward Indigenous peoples in the period *before* the graves were identified. To shed light on this possibility, I report on changes in non-Indigenous Canadians’ attitudes toward “racial minorities” using a feeling thermometer score in Figure A20.

Paralleling the main text findings (see Figure 4), there is a simultaneous improvement in attitudes toward racial minorities between May 2020 (just before George Floyd’s murder) and May 2021, before the first announcement. Feeling thermometer scores improve by 5.1% between these dates, while attitudes toward Indigenous peoples improve by 8.6%. Of course, we should be cautious in drawing conclusions from this analysis because the feeling thermometer

is measuring a different underlying concept, and not a different racial group. For this reason, I cannot rule out alternative explanations for the change in pre-treatment attitudes, but given the lack of a trend in attitudes toward Indigenous peoples between the summer 2019 and May 2020 surveys, George Floyd’s murder seems like a plausible explanation.

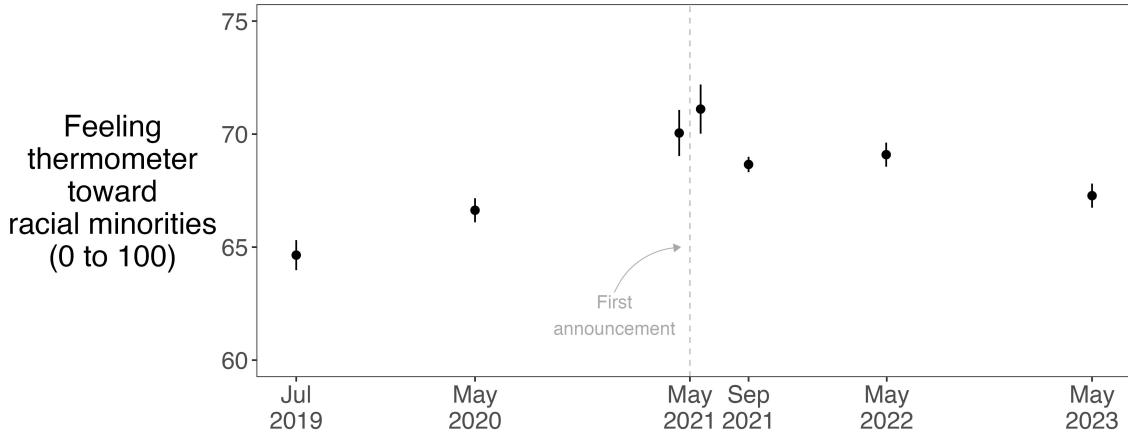


Figure A20: Feeling thermometer toward racial minorities, 2019 to 2023

Plot presents average and 95% confidence intervals for the feeling thermometer score reported by respondents towards racial minorities. The vertical dashed line indicates the initial announcement of unmarked graves in 2021.

If this is indeed the strongest explanation, Figure A20 raises an important question as to why George Floyd’s murder was associated with a more durable shift in attitudes toward marginalized groups than the unmarked graves announcements. I discuss several possible explanations, but one is simply that the George Floyd moment and subsequent protests attracted more attention. To investigate this possibility, I track relative Google search volume for several related terms over the course of 2020 and 2021. The results, summarized in Figure A21, indicate that, at its peak, search interest for “residential schools” was just 29% of the maximum search volume for “George Floyd.” This finding provides suggestive evidence that George Floyd’s murder shifted attitudes more durably because it attracted greater attention from the public.

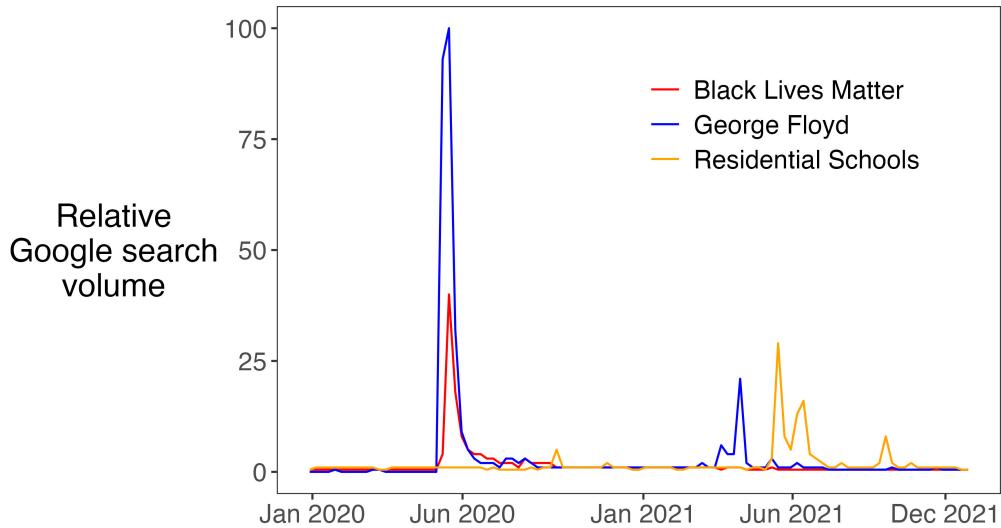


Figure A21: Relative Google search volume for injustices, 2020 to 2021

Plot reports weekly Google search volume for three terms from January 2020 to December 2021, scaled by the maximum search volume during this period.

## D.7 Public prioritization of Indigenous issues over time

The main analysis in this paper looks at changes in attitudes toward Indigenous peoples. Yet the public’s interest in Indigenous policy issues exhibited a similar pattern over time. I collated data from the Angus Reid Institute, a non-profit, non-partisan research foundation, on the percentage of respondents listing “Indigenous issues” or “reconciliation” among the top three policy issues they care about most when asked in repeated cross-sectional surveys from the past three years.

As Figure A22 shows, around 10% of Canadians provided this response in the months just before the first announcement in May 2021. Immediately after the unmarked grave announcements, this proportion more than doubled. Attention to Indigenous issues had not been as high since early 2020, when Indigenous communities protested against the construction of a natural gas pipeline in British Columbia. In that case, however, interest in Indigenous issues was less related to historical injustices than to conflicts over land rights and resource development.

Since the policy interest variable can reflect a diversity of viewpoints toward Indigenous

peoples, it cannot be used to infer opinion change. However, Angus Reid conducts polls as a higher frequency than the surveys used in the main analysis, so it is useful to examine how attention changed over the study period. After the initial increase in prioritization of Indigenous issues, interest returned to baseline levels within a year and, over the following months, trended even further downward. These findings are generally similar to the results for outgroup attitudes. And as with that outcome, the changes are similar across partisan groups: despite significant pre-announcement differences in the importance that supporters of different parties attached to Indigenous issues, the interest levels of each group increased only temporarily before quickly decaying in the months after the announcements.

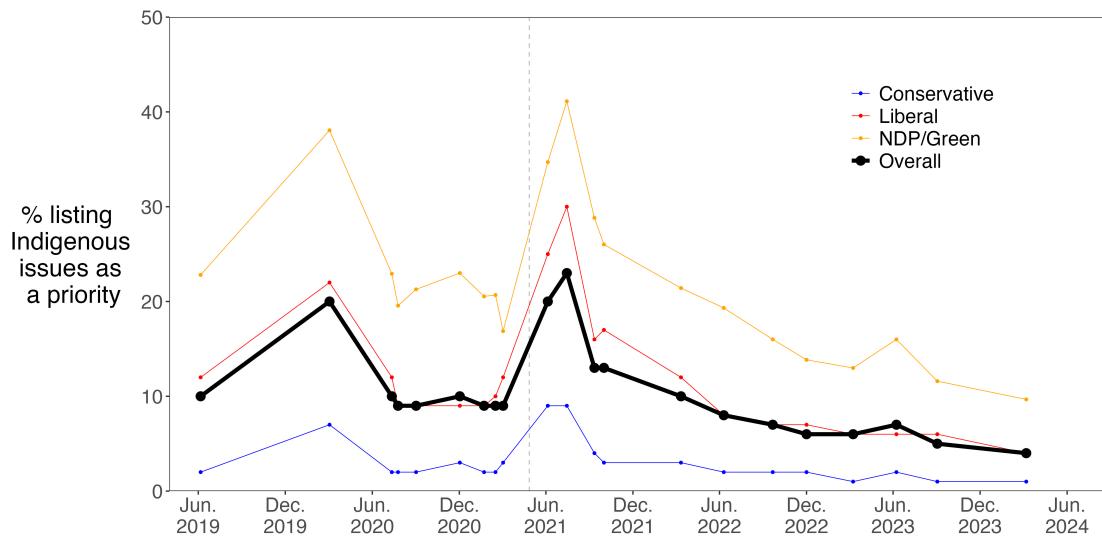


Figure A22: Public attention to Indigenous issues, 2019 to 2023

Data are from Angus Reid Institute public opinion polls; the *y*-axis indicates the percentage of respondents, by party and overall, that selected “Indigenous issues” as one of their top-three choices when responding to the question “Thinking of the various issues facing Canada today, which ones do you personally care about the most?”

## E. CANADA'S FIRST NATIONAL DAY FOR TRUTH AND RECONCILIATION

### E.1 Balance checks

On September 30, 2021, Canada held its first ever National Day for Truth and Reconciliation (NDTR), a federal statutory holiday that was signed into law shortly after the first unmarked graves announcement. Coincidentally, the survey dates of the Canadian Election Study overlapped with this date and, as in the main text, I compare those surveyed just before the NDTR against those surveyed just after in terms of their outgroup attitudes. Since the NDTR triggered a renewed attention to the history of residential schools (see Figure 5 in main text), this comparison seeks to descriptively capture the how an increase in the salience of the same issues correlated with the main outcomes in a naturalistic setting.

While a comparison between those surveyed just before and just after NDTR is not perfectly identified because the date of treatment exposure was not exogenous, it is nonetheless useful to check whether the two sets of respondents are similar in terms of their pre-treatment characteristics. To do so, I first compare the means on a host of presumably stable covariates in Table A7. Those in the pre- and post-NDTR samples are similar on most observable dimensions and many of the differences identified as statistically significant are small in magnitude.

Figure A23 presents a similar analysis, summarizing a model that regresses an indicator for being surveyed after the NDTR on the same set of covariates to test whether the differences persist after conditioning on other possible sample differences. The only notable result here is that a one standard-deviation increase in household income is associated with around a 1% greater likelihood of being treated. There are some other larger coefficients but they are not distinguishable from a null of no difference. In any case, I control for all variables in Figure A23 in the analyses that follow.

Table A7: Sample characteristics by treatment status

	Average		
	Pre-NDTR	Post-NDTR	Difference
Man	0.47	0.48	0.01
Age	53.4	52.5	0.82
White	0.79	0.82	0.03*
Bachelor's degree	0.44	0.45	0.01
Household income	\$80,576	\$89,422	\$8,846*
Catholic	0.30	0.31	0.01
Other Christian	0.22	0.23	0.01
Not religious	0.38	0.37	0.01
Born in Canada	0.84	0.87	0.03*
Political interest (0 to 10)	6.45	6.47	0.02
Region: Ontario	0.35	0.32	0.03
Region: Quebec	0.29	0.30	0.01
Region: BC	0.11	0.11	0.00
Region: Atlantic	0.06	0.08	0.02*
Local Indigenous %	0.04	0.04	0.00*
French-speaker	0.25	0.28	0.03
Party ID: Bloc	0.09	0.11	0.02
Party ID: Conservative	0.25	0.28	0.03
Party ID: Liberal	0.34	0.32	0.02
Party ID: NDP	0.15	0.15	0.00
Party ID: None/Other	0.23	0.21	0.02

\*p<0.05 in *t*-test for difference-in-means.

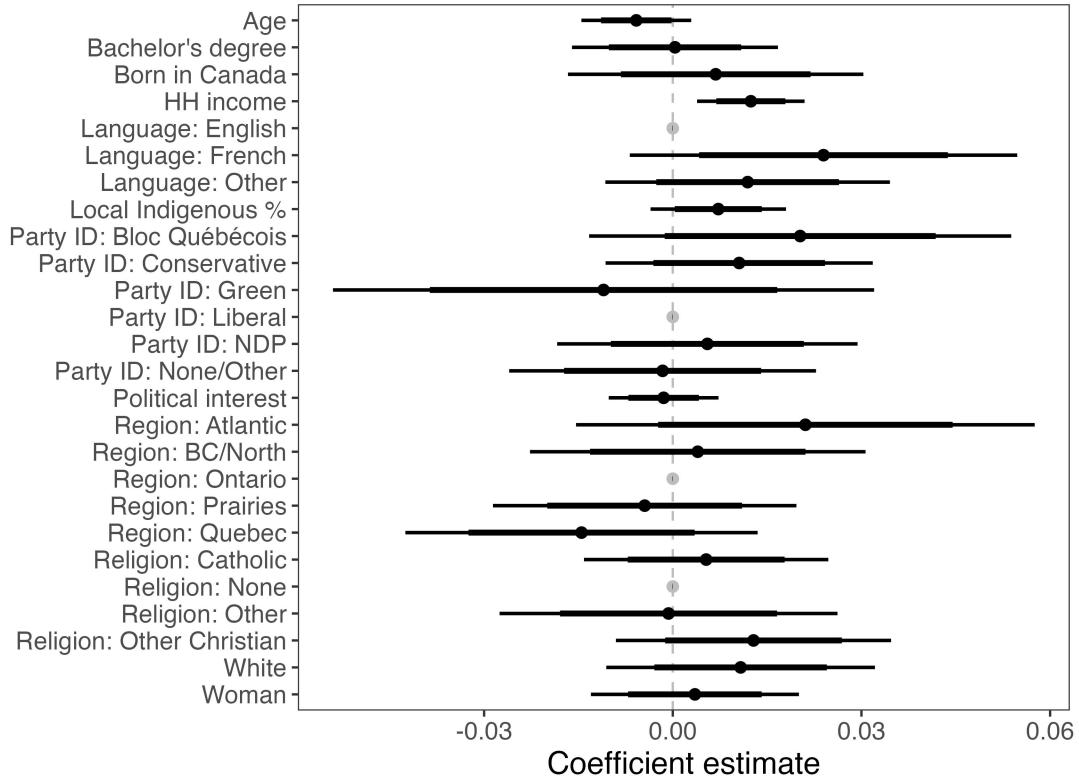


Figure A23: NDTR balance test

Plot presents coefficient estimates from an OLS model regressing treatment status on the variables listed on the *y*-axis. Bars indicate standard HC2 95% and Bonferroni-adjusted 95% confidence intervals. All variables are binary except for Age, Political Interest and HH income, which have been standardized such that the coefficient represents the implied effect of a one-standard deviation change. Reference categories for categorical variables are identified by grey points. ( $n = 11,440$ ).

## E.2 NDTR and outgroup attitudes

In Table A8, I evaluate how non-Indigenous Canadians responded to the renewed attention to residential schools around the NDTR. I regress outgroup attitudes on an indicator for whether respondents were surveyed on or after the NDTR. There is no strong indication that attitudes improved as a result of the increased attention. The results are slightly different depending on whether I employ covariate adjustment, but in the model most favourable to identifying an effect, the renewed attention only produced around 4% of a standard deviation more favourable outgroup attitudes. This point estimate is less than half the size of the effect of the initial unmarked graves announcement and is not statistically significant, despite a sample size almost three times as large as that used in the earlier analysis.

Table A8: NDTR and outgroup attitudes

	Outgroup attitudes	
Surveyed on or after NDTR	−0.004 (0.034)	0.042 (0.033)
Observations	12,369	10,729
Controls	No	Yes
R <sup>2</sup>	0.000	0.194

Coefficients are expressed in terms of pre-NDTR standard deviations. In model 2, the following covariates are included but not reported: gender, born in Canada, education, household income, party ID, political interest, religion, language, White, electoral district Indigenous percentage, province, and birth-decade fixed effects. \*p<0.05

## F. WHITE IDENTITY

### F.1 White identity and group attitudes

In the main text, I estimate bivariate associations between White identity categories and several group attitudes. The full outcomes in this analysis are as follows:

- **Importance of Canadian identity:** “How important are the following things to your identity? (Being Canadian)”
  - Measured on four-point scale from “not important at all” to “very important”
  - Source: 2021 Canadian Election Study
- **Proud to be Canadian:**
  - Measured on four-point scale from “not important at all” to “very important”
  - Source: 2020 World Values Survey
- **Support for renaming:** “Below are some actions that some believe should be taken to respond to those impacted by residential schools. Do you support or oppose the following actions? (Renaming buildings and institutions that are named for people who built or ran parts of the residential school system.)”
  - Measured on four-point scale from “Strongly oppose” to “Strongly support”
  - Source: 2021 Canadian Election Study

All estimates in the main text are from an OLS regression of the above variables on a three-level indicator for whether a respondent is a White Anglophone, White Francophone or racialized (either language). I identify respondents as White if they only self-identify with this racial category and no others. Language is based on the survey language chosen by the respondent.

## F.2 Raw data plot of outgroup attitudes by White Anglophone identity

The analysis in the main text presents only the event study estimates. To facilitate interpretation, Figure A24 summarizes outgroup attitudes at each time period in the data for White Anglophones versus all other respondents.

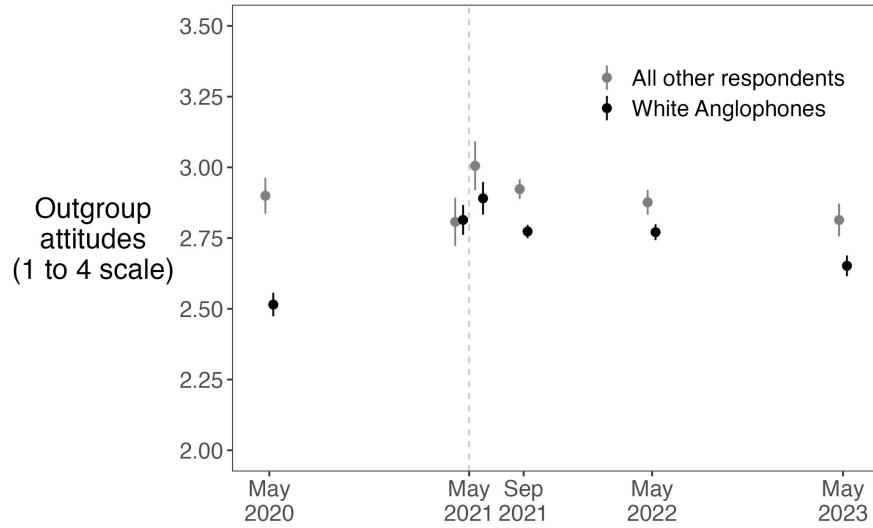


Figure A24: Attitudes toward Indigenous peoples by White Anglophone identity

Plot presents average and 95% confidence intervals for the mean of a respondent-level average of the two items measuring outgroup attitudes, with higher values indicating more favourable attitudes. In all but the September 2021 survey, this question was asked on a four-point Likert scale. For that specific survey, a five-point scale was used, but responses have been rescaled to match the four-point scale (see Appendix Figure A18 for individual response level prevalence over time). ( $n=34,247$ )

## F.3 Estimating full interaction between language and racial category

In the main text, I focus on White Anglophone attitudes compared against all other respondents. For completeness, I replicate the event study estimates here using a model that interacts an indicator for White  $\times$  linguistic identity with the time fixed effects. I continue to group all racialized respondents together as a reference category, because only 2% of the sample is made up of racialized Francophones. Figure A25 presents the results. The estimates are broadly in line with those in the main text: White Anglophones' outgroup attitudes decline significantly more relative to pre-announcement levels than racialized respondents. Changes in White Francophone attitudes, by contrast, are statistically indistinguishable from those of

racialized respondents. The over time differences between these groups hover around zero for all periods beginning with September 2021. The differences in coefficient magnitude for White Anglophones and White Francophones are not statistically significant.

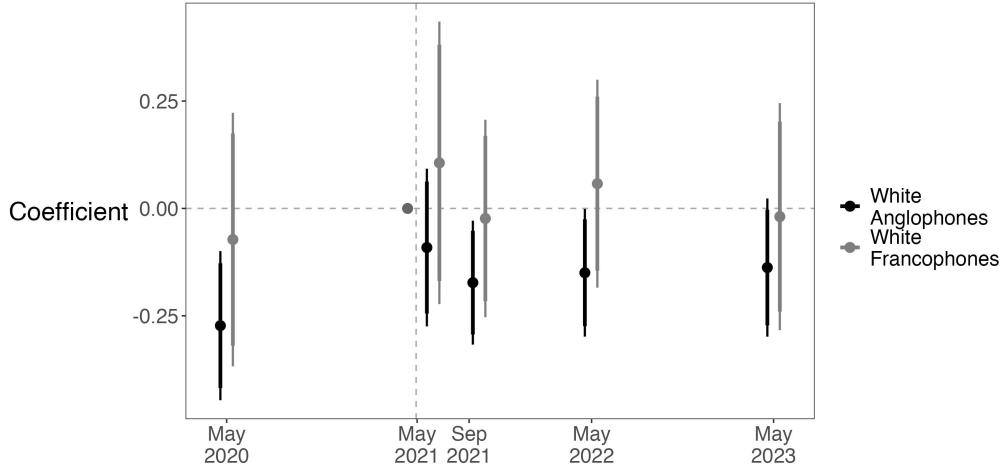


Figure A25: Event study estimates of White identity  $\times$  language on outgroup attitudes

Coefficients and 95% robust confidence intervals come from event study model (pre-announcement respondents in May 2021 are the reference category). Estimates represent the difference in the over-time change in outgroup attitudes between White Anglophones and Francophones versus racialized respondents at each survey period. Outcome is scaled in terms of May 2021 pre-announcement standard deviations. Model also includes the following covariates and their interactions with the time period variable: gender, Party ID, immigration status, religion, local Indigenous population share, region and birth decade fixed effects. ( $n=29,467$ ).

#### F.4 Estimating interaction between partisanship and White Anglophone identity

As noted in the main text, conservative politicians in Canada made statements that pushed back against discourse challenge Canada's positive self-image after the unmarked graves announcements. To account for this partisan messaging, my main estimation strategy also controls for interactions between time fixed effects and party ID. This helps ensure that the estimated change in White Anglophones' attitudes is not merely a change in partisan attitudes. In the main model, the differences in over time attitudinal changes between Conservative supporters and partisans of other parties are small and not generally significant.

A separate question is whether conservatives' rhetoric only influenced White Anglophones who support the Conservative Party. Figure A26 reports results from a model interacting

the racial-linguistic indicator with a dummy for whether a respondent identifies with the Conservative Party and the time fixed effects. The estimates indicate that, if anything, the stronger reversion in attitudes among White Anglophones relative to racialized people and White Francophones is driven by non-Conservatives. This finding suggests that White Anglophones' differential trends in outgroup attitudes cannot be entirely explained by partisan cue-taking.

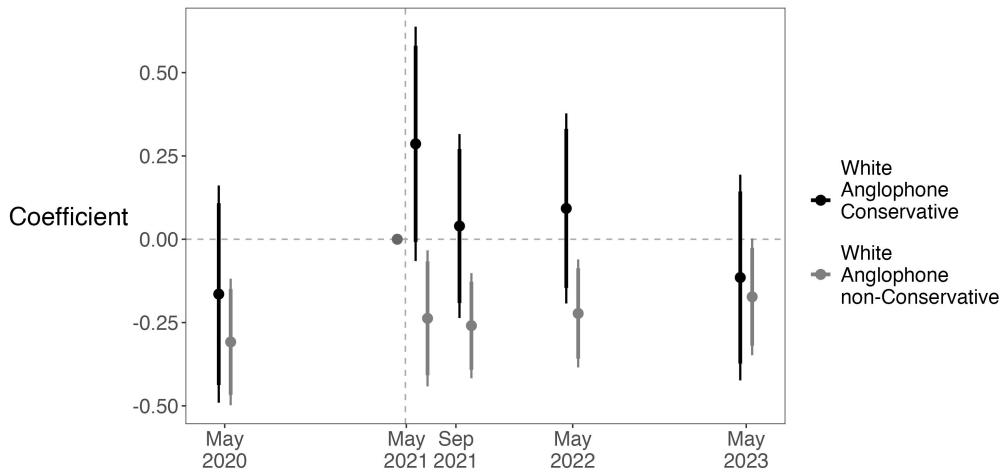


Figure A26: Event study estimates of White Anglophone identity  $\times$  Conservative partisanship on outgroup attitudes

Coefficients and 95% robust confidence intervals come from event study model (pre-announcement respondents in May 2021 are the reference category). Estimates represent the difference in the over-time change in outgroup attitudes between White Anglophone Conservatives and non-Conservatives versus all other respondents at each survey period. Outcome is scaled in terms of May 2021 pre-announcement standard deviations. Model also includes the following covariates and their interactions with the time period variable: gender, immigration status, religion, local Indigenous population share, region and birth decade fixed effects. ( $n=29,467$ ).

## F.5 Robustness to using White $\times$ Quebec vs. ROC identity

In the main text, I make a distinction between White Anglophones and White Francophones. There are also good reasons to analyze White people living in Quebec versus those living in the rest of Canada (ROC). In Table A9, I report results equivalent to Figure 6 in the main text, except dividing White respondents based on their place of residence. The reference category is racialized respondents living anywhere in Canada. Results are nearly identical to those in the main text using the linguistic cleavage.

Figure A27 similarly replicates the results of the event study analysis, differentiating between White respondents in Quebec versus ROC. As expected, coefficients are only negative and significant for White people living outside of Quebec.

Table A9: Bivariate associations between White regional and linguistic identity versus group attitudes

	Importance of Canadian identity	Proud to be Canadian	Support for renaming
White identity (Quebec)	−0.359* (0.028)	−0.194* (0.051)	−0.145* (0.046)
White identity (ROC)	0.260* (0.022)	0.214* (0.042)	−0.273* (0.042)
Observations	13,011	3,881	3,864
R <sup>2</sup>	0.067	0.029	0.011

Coefficients have been standardized such that estimates represent standard deviation changes. HC2 standard errors in parentheses. Data for the first and third models are from the September 2021 Canadian Election Study and data for the second model is from the October 2020 World Values Survey. \*p<0.05

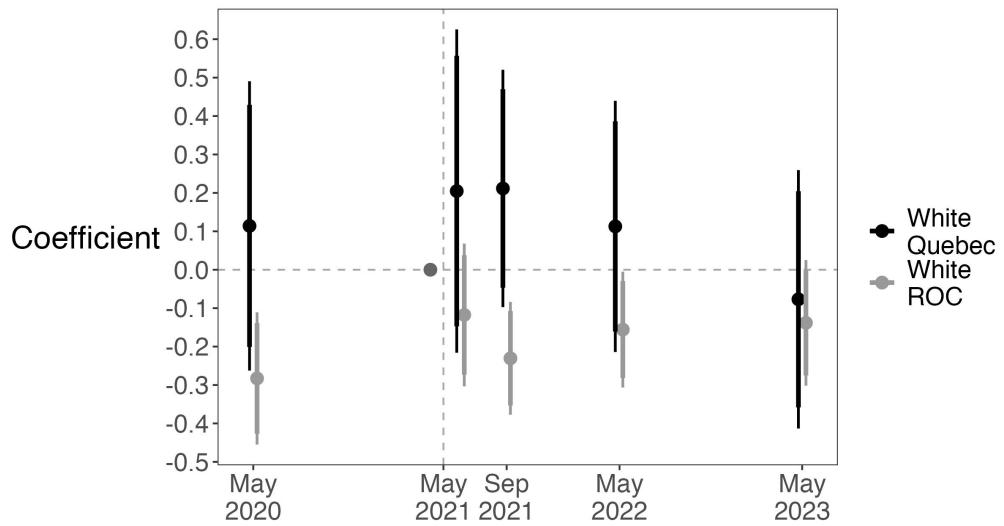


Figure A27: Event study estimates of White regional identity on outgroup attitudes

Coefficients and 95% robust confidence intervals come from event study model (pre-announcement respondents in May 2021 are the reference category). Estimates represent the difference in the over-time change in outgroup attitudes between White people living in Quebec and the rest of Canada (ROC) versus racialized respondents at each survey period. Outcome is scaled in terms of May 2021 pre-announcement standard deviations. Model also includes the following covariates and their interactions with the time period variable: gender, Party ID, immigration status, religion, local Indigenous population share, region and birth decade fixed effects. ( $n=29,467$ ).

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