Do Politicians and Citizens Agree on How to Combat COVID-19? Evidence from Three Studies

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Abstract

Government responses to the COVID-19 pandemic have involved important tradeoffs between shutting down services, businesses, and other activities, and saving lives. To maintain public support for these policy decisions, it is important that citizens and politicians agree on which sectors and services should be closed to combat the pandemic. We investigate the presence or absence of this agreement using a paired survey of more than 600 politicians and several thousand citizens in Canada. We have three main findings. First, citizens and politicians are generally aligned on the policies that should – and should not – be used to combat COVID-19. Second, they nevertheless disagree in one crucial area: politicians express a greater willingness than citizens to keep schools open. Third, politicians overestimate public support for reopening schools. Our findings deepen our understanding of COVID-19 policy and have important implications for the study of policy responsiveness and representation.

1 Introduction

The COVID-19 pandemic has forced political leaders to contemplate policy action at unprecedented speed and scale. In many countries, aggressive government policy has been matched by citizens' willingness to make major personal sacrifices, all in the name of reducing viral transmission and protecting public health. However, these policies involve difficult tradeoffs – not only among core liberal-democratic commitments, such as health, freedom, and economic growth, but also, equally importantly, between the aggressiveness of policy action and

citizens' willingness to comply. Continued citizen compliance with COVID-19 policies requires that political leaders' choices match the priorities of their citizens and strike a balance between policy necessity and citizen consent.

How good are political leaders at striking this balance? Since the beginning of the COVID-19 pandemic, political scientists have provided good data on public opinion (**??**) and the policy actions that governments have taken in response to COVID-19 (**?**). Yet we know very little about the relationship between political leaders' thinking and their citizens' preferences. We need to understand this relationship not only to identify possible points of tension between government policy and public compliance, but also to assess the extent to which government action is responsive to citizen priorities in circumstances of difficult and rapid policy making.

We investigate if politicians and constituents agree on the tradeoffs involved in COVID-19 policymaking by directly comparing politicians and constituents in concurrent surveys of hundreds of politicians and thousands of members of the general public. Our data are drawn from politicians and the public in Canada, a federal country with highly distributed policy authority and a high amount of policy attention to COVID-19 at all levels of government. Canada has experienced two serious waves of COVID-19, with marked variation in the speed and character of policy responses and considerable public debate about the appropriate mix of policies in a COVID-19 response. In three studies, we find substantial congruence between politicians and their constituents: they agree on most of the policy restrictions that are (and are not) worth accepting to reduce COVID-19 deaths, as well as the businesses and services that are worth closing to maintain in-person schooling. In addition, we show that politicians' perception of public support for school openings is responsive to variation in actual local support. However, we also uncover important areas of misunderstanding and misalignment. We find that politicians not only prioritize school openings more than their constituents, but also overestimate the level of public support among their constituents for in-person schooling.

Our results contribute to a growing literature on policy alignment (and misalignment) between citizens and politicians. This literature has shown that politicians routinely make errors in estimating the policy preferences of citizens (**??**). Building on this research, we offer the first direct comparison of citizen and politician preferences and perceptions in the important and distinctive context of a global pandemic. We find striking evidence that both citizens and policy makers are willing to accept higher COVID-19 death totals to avoid some policy restrictions; there are some policy interventions that both the public and policy makers are simply unwilling to consider, even if they might reduce COVID-19 deaths. However, politicians and citizens do not always agree on the specific policy restrictions that are worth accepting. We conclude by discussing the implications of these findings for our theories of policy responsiveness and political representation.

2 Study 1: Policy Interventions Conjoint Experiment

Our first study leverages a preregistered conjoint experiment, administered in concurrent surveys of politicians and the general public, to assess preferences regarding possible policy interventions during an anticipated second wave of COVID-19. Conjoint experiments enable researchers to test how particular features of a decision situation affect an individual's probability of selecting a given choice (see, for example, **??**, for methodological discussions of conjoints). We administered a conjoint experiment to 690 federal, provincial/territorial, and local politicians and to 3,952 members of the general public – asking respondents to consider which of two "baskets" of policies they would choose if a second wave of COVID-19 infections necessitated a new policy response in the fall of 2020.[1] Within each of the two policy baskets, we randomly assigned seven policy features: tracking of individual locations using mobile phones (mandatory vs. voluntary), schools (open vs. closed), non-essential businesses (open vs. closed), non-essential government services (open vs. closed), public gatherings (no limit vs. five-person maximum), written permission required to leave home (yes vs. no), and government financial support (more, same as now, or less). These options capture a range of plausible baskets of second-wave policies; while some are certainly more aggressive than others, all were implemented in at least one country during the first wave of the COVID-19 pandemic.

For each randomly assigned basket of policies, we also specified an estimated total number of deaths the policy basket would produce (ranging from 1,000 to 10,000) and an estimated number of deaths among the elderly in particular (70%, 80%, or 90% of the estimated total). This setup enables us to assess the effects of specific policy interventions — as well as the effects of the number of deaths associated with them. Figure 1 plots the Average Marginal Component Effects (AMCEs) from the conjoint experiment, along with their associated 95% confidence intervals. The left panel reports the AMCEs for the general public sample, the middle panel reports the AMCEs for the politician sample, and the right panel reports the difference in the AMCEs between the two samples.[2]

The AMCEs reported in Figure 1 show the independent effect of each attribute on the probability of choosing a given policy basket. For example, among the general public, we find that the effect of mandatory phone tracking — relative to the baseline alternative of voluntary phone tracking — reduces the probability of choosing the policy basket by 7.2 percentage points (p<0.001). We

[1] For the general public, the conjoint was fielded in two surveys: May 21-27, 2020 and August 31-September 8, 2020. For provincial/territorial and federal politicians, responses were collected between May 24, 2020 and June 22, 2020. For local politicians, which included elected municipal politicians (mayors, councillors, deputy mayors, regional councillors, and borough mayors) for every municipality above 9,000 population, as well as elected school board trustees in the province of Ontario, responses were collected between September 9, 2020 and October 29, 2020. Additional details about the general public and politician surveys are provided in the appendix.

[2] Additional detail on the estimation procedure is available in the appendix.

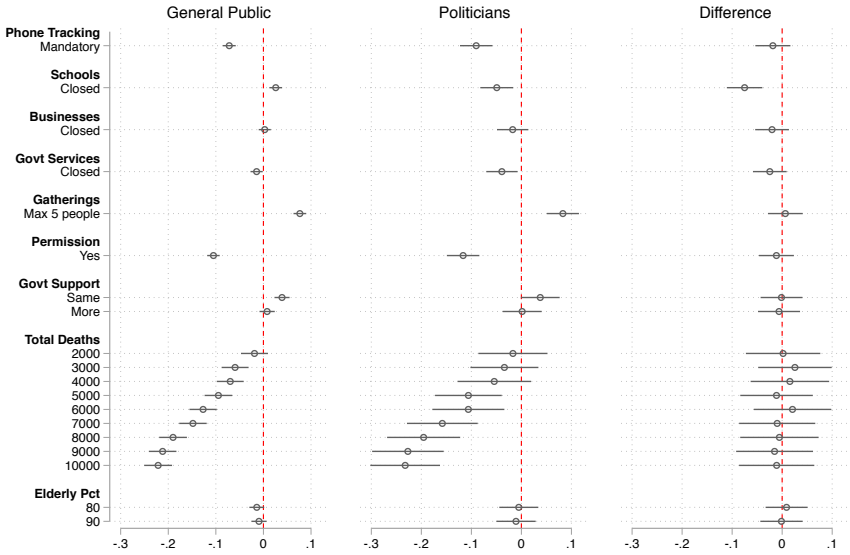


Figure 1: Average Marginal Component Effects Among the General Public, Politicians, and the Difference between the Two

This plot presents the Average Marginal Component Effects (AMCEs) from the conjoint experiment, along with their associated 95% confidence intervals (based on standard errors clustered by participant). The left panel reports the AMCEs for the general public sample. The middle panel reports the AMCEs for the politician sample. The right panel reports the difference between these two sets of AMCEs by pooling the two samples and estimating a model in which each component is interacted with a binary indicator of the politician sample. The baseline reference categories for the conjoint attributes are as follows: mobile phone tracking (voluntary); schools (open); non-essential businesses (open); non-essential government services (open); public gatherings (no limit); written permission needed to leave home (no); government financial support (less than now); estimated total deaths (1,000); and estimated percentage of elderly deaths (70).

similarly find that other restrictive policies are unappealing to citizens. Closing non-essential government services and requiring written permission to leave home also significantly reduce the probability of choosing the policy basket. Not all restrictions yield a negative effect, however. Notably, we find a small but statistically significant positive effect for school closures. Policy baskets in which schools are closed are 2.6 percentage points (p<0.001) more likely to be chosen by citizens than policy baskets in which schools remain open. Likewise, bundles in which public gatherings are limited to five people are 7.7 percentage points (p<0.001) more likely to be chosen than bundles in which such gatherings are unrestricted.

How do politicians' choices compare to those of the public? Figure 1 suggests the AMCEs among the public and among politicians are very similar.

Like citizens, politicians are less likely to select policy bundles that include mandatory phone tracking (compared to a voluntary regime), closing government services (compared to keeping them open), or written permission to leave home (compared to no such requirement). In fact, as is clear in the right panel of figure 1, we find only one instance of a detectable difference in AMCEs between politicians and citizens: the effect of school closures. Unlike the general public, politicians on average resisted school closures; they were 4.9 percentage points (p=0.003) *less* likely to choose a policy basket in which schools were closed than one in which they were open.

Figure 1 also reveals similar effects among citizens and politicians regarding the expected deaths associated with the policy bundles. Both groups had a negative and largely linear response to increases in death totals. For example, among the general public, a scenario with 10,000 deaths was 22.1 percentages points less likely to be selected than the baseline reference category in which 1,000 deaths was expected. The effect among politicians was statistically indistinguishable from that of the public. Despite the statistically and substantively significant effects of total deaths on the choices of citizens and politicians alike, however, it is worth noting that — among both groups — death was not the sole determining factor. For example, among citizens, the predicted probability of choosing a policy bundle associated with 10,000 deaths — the deadliest scenario in the experiment — was 39%; the same figure among politicians was 38.2%. This underscores the influence of other factors, notably the aggressiveness of some mitigation policies, in COVID-19 decision making.

Taken together, we draw three main lessons from the conjoint experiment. First, participants' choices were not driven exclusively by the aim of minimizing deaths; this was true among politicians and citizens alike. Second, across nearly all policy options in the experiment, politicians' and citizens' choices were very similar, suggesting important areas of mass-elite alignment in COVID-19 policy responses. Third, we do see one important area of policy in which politicians and the public respond in different ways: school closure increased the probability of choosing the policy basket among the general public but decreased the probability of choosing the policy basket among politicians. In the next two studies, we explore this difference in more detail.

3 Study 2: Business/Service Closures and School Openings

The conjoint experiment in study 1 revealed potential misalignment between politicians and citizens on school closure policies. Study 2 assesses this misalignment in more detail by investigating the business or service closures that politicians and constituents are willing to consider in order to maintain in-person schooling. We asked politicians and the general public which of five items – restaurants, bars, shopping centres, gyms, and health services (e.g. chiropractors, massage therapists) – they would be willing to close in order to keep

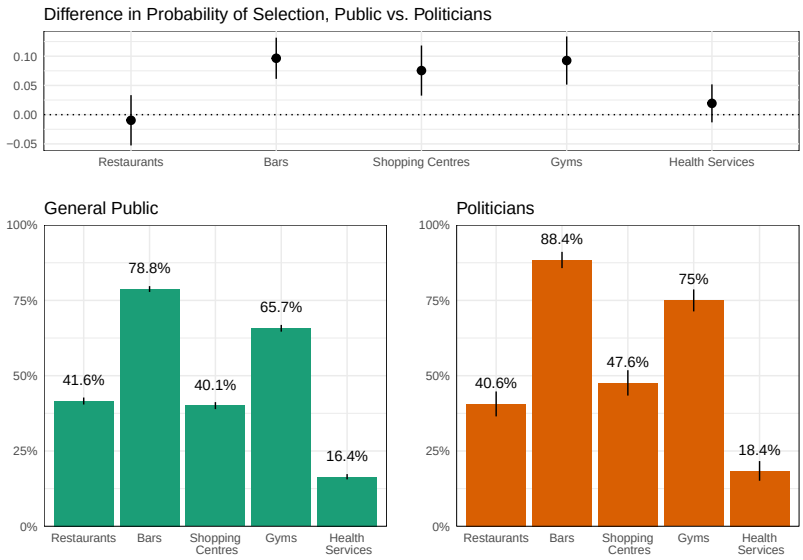


Figure 2: Closures to Maintain In-Person Schools

Proportion of politicians (orange) and public (green) who would be willing to close each business or service in order to maintain in-person schooling. Top panel summarizes difference between politicians and the public for each item.

in-person schools open.[3] This study allows us to directly compare politicians to their constituents on a decision that has been extremely prominent in debates about COVID-19 policy: the priority of school openings relative to other businesses and services.

Figure 2 summarizes the proportion of the public and politicians who would be willing to close each item in order to maintain in-person schooling. In general, we see substantial congruence between politicians and the public: the probability of politician support is below 50% when public support is below 50%, and above 50% when public support is above 50%. Both politicians and the public are willing to close gyms and bars, and unwilling to close health services, restaurants, or shopping centres, to keep schools open. However, despite this general congruence, the figure also reveals that politicians are significantly more likely than the public to select bars, shopping centres, and gyms. Here, too, politicians appear to differ systematically from their constituents with respect to school-related policies.

To provide a more direct test of the differences between politicians and their constituents on these policy choices, we use multilevel regression and poststrat-

[3]For the general public sample, this question was fielded in four surveys: September 15-21, 2020; September 21-28, 2020; September 29-October 5, 2020; and October 6-14, 2020. For the politician sample, this question was fielded only to the local politician sample. The collection dates for the local politicians are the same as those listed in study 1.

ification (MRP) to estimate the average number of businesses or services the public would be willing to close in order to maintain in-person schooling for each of 405 municipalities.[4] We then match these municipal estimates to 416 municipal politicians, allowing us to directly compare politicians to the public within their own local communities. We find that politicians select, on average, 0.36 more items from the five-item list than their constituents (p<0.01). This is a modest but consistent and statistically significant difference, reinforcing evidence from study 1 of a systematic divergence between politicians and the public on school-related COVID-19 policy.

4 Study 3: Elite Perceptions of Public Opinion on School Openings

One possible cause of the observed misalignment in studies 1 and 2 between politicians and constituents on school-related COVID-19 policy is politicians' misperception of their constituents' views. Study 3 assesses this possibility by asking the public if they agree or disagree with the statement that school openings in the fall of 2020 are worth the risk. In a concurrent survey, we displayed the same question to politicians and asked what percentage of their constituents would agree.[5] As in study 2, we use MRP to construct estimates of the proportion of individuals in each municipality who agree with the statement, and then match the municipal MRP estimates to politicians' perception of public opinion in the same municipalities.

We find that politicians substantially overestimate local public support for school openings. The overall relationship between perception and local opinion is positive, indicating that politicians do perceive higher levels of support in places where support is in fact higher. However, the politicians' perceptions are, on average, biased upward by 13 percentage points (p<0.01).

Figure 3 summarizes this relationship, comparing MRP estimates of municipal public opinion (the horizontal axis) to politicians' perceptions of municipal opinion (the vertical axis). The black line marks the expected relationship if perception perfectly corresponded with local opinion. The orange line is a non-parametric summary of the actual relationship between the two quantities. The orange line is consistently well above the black line, indicating consistent overestimates by politicians through the full distribution of local opinion.

[4] Multilevel regression and poststratification (MRP) enables researchers to construct public opinion estimates for local geographies from large national samples. MRP has been shown repeatedly to increase the accuracy and precision of estimates relative to alternative procedures, such as disaggregated mean estimates (**??**). We provide full details on model specification and convergence in the appendix. All results reported in the main text are restricted to municipalities for which we have at least ten local public opinion responses; we report results for all municipalities and other thresholds in the appendix, for which substantive results are identical.

[5] The collection dates for the general public and local politician samples are the same as those listed in study 2.

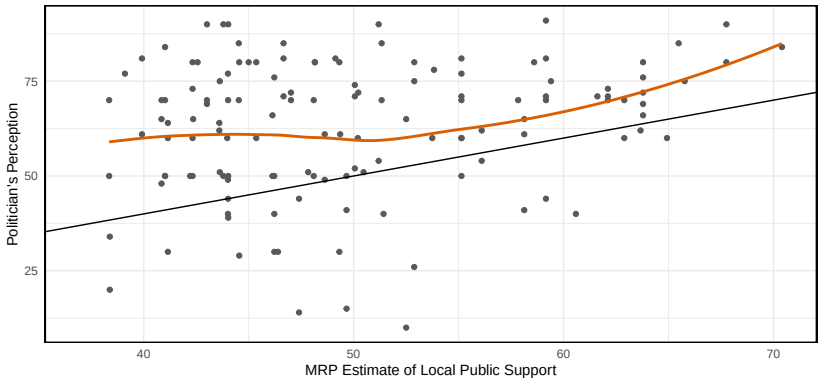


Figure 3: Politicians' Perception of Public Support for School Openings

MRP estimates of public support for school openings (x axis) and politicians' perceptions of support (y axis). Black line marks perfect correspondence; orange line summarizes actual relationship between politicians' perceptions and municipal public opinion.

5 Discussion

While some COVID-19 policy decisions involve win-win scenarios across multiple dimensions of public life – public investment in vaccines, for example, is beneficial for public health, economic activity, *and* citizens' freedom of mobility – many COVID-19 policy decisions have involved difficult tradeoffs. The success or failure of these policy decisions depends, in part, on citizens' beliefs that policy makers' priorities match their own. By providing the first direct comparison between politicians and their constituents on COVID-19 policy choices, we have found that politicians are aligned with their constituents on a number of COVID-19 policy restrictions, as well as the businesses and services they would be willing to close in order to maintain in-person schooling. However, we have also found consistent evidence of misalignment between politicians and their constituents on the important issue of school openings: politicians appear more willing than the public to keep schools open (study 1) and are more willing to close certain businesses and services in order to achieve this (study 2). We have found that this misalignment may arise, in part, from an overestimation by politicians of the public's support for school openings (study 3).

Political science research suggests several possible mechanisms of misalignment between politicians and the public, including politicians' perceptions of their constituents' preferences. Politicians may be more likely to be selected from particular socio-demographic groups, particularly advantaged groups, and their attitudes may reflect those groups rather than the wider population (**??**). Differences in risk aversion may also make politicians less willing than the public to consider bold departures from status quo policies, except in circumstances of perceived electoral vulnerability (**??**).

Politicians may also be more likely to hear from constituents with particular

views, producing availability bias in perceptions of public attitudes (**??**). In fact, our data provide suggestive evidence that policy advocacy by parents may play a role in politicians' misperceptions of public support for school openings. In our conjoint experiment, we find that non-parents were 3.5 percentage points more likely to select a policy bundle where schools were closed (p<0.001). By contrast, the effect of school closures did not have a statistically significant effect on choice among parents – and the *difference* in the effect between non-parents and parents approaches significance at conventional levels (p=.058). Moreover, while parents were more likely than non-parents to agree that school openings are worth the risk, politicians perceive no difference, on average, in support for school openings among the general public when compared with parents.[6] If local politicians are more likely to hear from parents than other constituents about school openings, and if they tend to assume that parents' attitudes do not differ markedly from others in their community, this could be a source of the overestimates that we uncover in our results.

Amidst the rapidly evolving information environment of the COVID-19 pandemic, a final possible mechanism of misalignment could arise from availability bias of a different sort: politicians may assume that the public has access to similar *information* to inform their preferences. While research is ongoing, recent studies suggest that children are less likely than adults to contract COVID-19 (**??**), unlikely to experience severe illness when infected (**?**), and that transmission from children to adults may be less common (**?**). These findings may be more readily available to elected representatives than to the general public, producing divergent risk perceptions among the two groups.

Misalignment between politicians and the public on the issue of school openings does not necessarily require that politicians abandon their preference for maintaining in-person schools. Given the currently available research on school openings and COVID-19 transmission, opening schools may not in fact necessitate major tradeoffs in other domains, such as business or service closures, and have substantial spillover benefits for many children and working parents. However, even if this is the case, politicians' misperception of public support for school openings may lead them to underestimate the need for substantial and ongoing political leadership in this area, including serious efforts at public engagement and science communication.

While we have emphasized schools — an area of salient public debate in many jurisdictions — our findings illustrate the possibility for misalignment between politicians and their constituents on other policy choices that we have not directly investigated, such as mask-wearing, testing protocols, travel restrictions and vaccination roll outs. Our evidence suggests the public clearly

[6] We asked politicians to estimate local support among municipal residents in general as well as parents. More than 20% of local politicians chose identical values for public and parent support. 38% thought parents would be less likely to support school openings, and 41 percent said the opposite. The overall difference in perceived general public and parent support was less than one percentage point and not statistically significant (p=0.57). Our public opinion survey found that parents' support was 3.3% higher than non-parents (p¡0.05); when we adjust for region, gender, age, and education, the difference between parents and non-parents rises to 8.3% (p¡0.01).

understands that difficult tradeoffs are necessary to confront the COVID-19 pandemic. Many citizens are willing to see their governments move quickly and aggressively away from the status quo to respond to the pandemic – more quickly, in some cases, than politicians have been willing to consider. Taken together, these three studies provide systematic evidence of how, despite overall congruence and responsiveness, politicians and their citizens can be misaligned on important policy issues not only in "normal times", but also on urgent and highly salient policy issues.

Online Appendix For: Do Politicians and Citizens Agree on How to Combat COVID-19?

May 2021

Contents

1 Survey Data Sources and Question Wording

Our data are drawn from surveys of the general public and of elected federal and provincial/territorial legislators, municipal mayors and councillors, and school trustees. In table A1, we list each survey, its field dates, its total sample size, and how it is used in the main text.

Survey	Field Dates	Participants	Usage
GenPop Wave 8	May 21 - 27, 2020	2,527	Study 1
Fed./Prov./Terr. Politicians	May 24 - June 22, 2020	103	Study 1
GenPop Wave 19	Aug 31 - Sep 8, 2020	1,502	Study 1
Municipal Politicians	Sep 9 - Oct 29, 2020	665	Studies 1, 2, and 3
Ontario School Trustees	Sep 9 - Oct 29, 2020	188	Studies 1 and 2
GenPop Wave 21	Sep 15 - 21, 2020	1,481	Studies 2 and 3
GenPop Wave 22	Sep 21 - 28, 2020	2,503	Studies 2 and 3
GenPop Wave 23	Sep 29 - Oct 5, 2020	1,510	Studies 2 and 3
GenPop Wave 24	Oct 6 - 14, 2020	1,481	Studies 2 and 3

Table A1: Overview of Surveys Used

1.1 General Public Survey Data

Our survey data for the general public come from five waves of an online survey that elicited Canadians' views about COVID-19. The surveys were fielded to an opt-in panel of respondents obtained from a commercial survey provider. For all waves, we set quotas for gender, age, language, and region using population benchmarks from the 2016 Canadian Census. In addition, to increase the representativeness of the sample, the data are weighted within region by age and gender using iterative proportional weighting.

1.2 Federal and Provincial/Territorial Politician Survey Data

Responses from provincial/territorial and federal legislators (i.e., members of the provincial/territorial legislative assemblies and members of the federal House of Commons) were collected between May 24, 2020 and June 22, 2020. We received a total of 103 responses from a sampling frame of 1,073 federal and provincial/territorial politicians, for a response rate of 9.6%. We use these survey responses only for the conjoint experiment reported in study 1.

1.3 Municipal Politician Survey Data

We collected responses from currently elected municipal politicians (mayors, councillors, deputy mayors, regional councillors, and borough mayors) for every municipality above 9,000 population in Canada. We restricted our sampling frame to municipalities above 9,000 population because our public opinion sample sizes do not allow us to construct precise MRP estimates of local opinion in very small municipalities.

Responses were collected between September 9, 2020 and October 29, 2020. We received 665 responses from a sampling frame of 3,603 politicians, for a response rate of 18.5%. We use these responses in all three studies; they form the basis for our direct comparison between politicians and constituents in studies 2 and 3 because available census data allows us to construct local estimates of public opinion by municipality, but not by legislative district or school district (note, however, that the aggregate results reported in figure 2, which include both municipal politicians and school trustees, are substantively identical to the direct comparison). In sections 5 and 6, we show that our findings are consistent for a variety of subsamples of municipal politicians.

1.4 Ontario School Trustee Survey Data

We collected responses from currently elected school board trustees in the province of Ontario, the only province for which we have access to up-to-date contact information. Collection dates for this survey were identical to the survey of municipal politicians. We received 188 responses from a sampling frame of 653 politicians, for a response rate of 29%. We use these survey responses for the conjoint experiment reported in study 1 and for the aggregate responses reported in figure 2 of study 2.

1.5 Survey Question Wording

The wording for the survey questions we used in each of the three studies is described below. In addition to these questions, we used three standard demographic questions to construct the MRP model: the respondent's age (calculated from their reported year of birth), their gender, and their highest level of education.

1. Survey Questions: Study 1:
    - General public surveys: "Many experts are saying a second wave of the COVID-19 disease is likely in the fall. In the event this happens, which of the following do you think would be the right course of action for the Canadian government? Response A or Response B?" (This is followed by randomized pairs of options as described in the main text. Participants completed three iterations of this question.).
    - Federal/Provincial/Territorial, Municipal, and Trustee surveys: identical to public opinion survey.
2. Survey Questions: Study 2:
    - General public surveys: "Keeping schools open may require stricter rules for other businesses or services. Which of the following would you be willing to close if it meant that schools would stay open with in-person classes through the entire school year? Please select all that apply. (Restaurants, Bars, Shopping Centres, Gyms, Health Services (e.g. Chiropractors, Massage Therapists)."
    - Municipal and Trustee surveys: Identical to public opinion survey.

3. Survey Questions: Study 3:

   - General public surveys: "Reopening schools this fall with full-time, in-person classes is worth the risk. (Strongly agree, somewhat agree, somewhat disagree, strongly disagree, don't know)."
   - Municipal survey: "To the best of your knowledge, what percentage of each of the following groups would agree that reopening schools this fall with full-time, in-person classes is worth the risk? The General Public in Your Municipality / Parents in Your Municipality / Teachers in Your Municipality. (Slider 0-100 plus don't know option)."

2 Municipal Politician Sample: Detailed Breakdown

Because our sample of municipal elected officials serves as the main foundation for our analysis in studies 2 and 3, we provide additional detail here on the composition of that sample. Table A2 compares the sample to the population on two observable characteristics: province of residence and gender. Our sample is representative of the regional distribution of Canadian municipal politicians, with one exception: we have a relatively high number of participants from Ontario (8.5% more than would be expected from the population) and a relatively low number of participants from Quebec (11.8% fewer than would be expected from the population). We also have a slightly higher than expected number of participants who are women (6.1% more than the population). To ensure that our findings are not unduly influenced by this overrepresentation among Ontario politicians and women, we show in sections 5 and 6 below that our findings are consistent within subsamples of the municipal politician population, including in a Quebec-only sample, and use simulations to test the sensitivity of our results to selection effects from the larger population.

Category	Sample	Sample.Freq.	Population	Population.Freq.	Difference
AB	92	0.14	378	0.10	0.040
BC	77	0.12	443	0.12	0.000
MB	22	0.03	110	0.03	0.004
NB	24	0.04	110	0.03	0.007
NL	9	0.01	55	0.01	-0.001
NS	18	0.03	118	0.03	-0.004
ON	292	0.44	1355	0.36	0.085
PEI	4	0.01	26	0.01	-0.001
QC	114	0.17	1104	0.29	-0.118
SK	10	0.01	94	0.03	-0.010
M	384	0.62	2584	0.68	-0.061
F	238	0.38	1225	0.32	0.061

Table A2: Municipal Politicians: Sample vs. Population

3 Multilevel Regression and Poststratification

To construct our local public opinion estimates in study 2 and study 3, we begin by fitting a Bayesian multilevel model of public support for our outcome of interest with varying demographic, municipal, and regional intercepts.

In study 2, we model individual responses as a function of age-sex-education combinations, municipal intercepts, and regional intercepts, as follows:

$$Y_i = \theta_0 + \alpha_{j[i]}^{age.sex.edu} + \alpha_{k[i]}^{mun} + \alpha_{l[i]}^{region}$$

In study 3, we modify the model to suit the binary outcome variable:

$$log\frac{p(agree_i)}{1-p(agree_i)} = \theta_0 + \alpha_{j[i]}^{age.sex.edu} + \alpha_{k[i]}^{mun} + \alpha_{l[i]}^{region}$$

In both studies, we model age, gender, and education intercepts as drawn from a normal distribution with mean zero:

$$\alpha_j^{age.sex.edu} \sim \mathcal{N}(0, \sigma^2_{age.sex.edu})$$

We model municipal intercepts as predicted by regional intercepts as well as a set of municipal predictors: logged population density, logged population size, estimated Conservative Party vote share by municipality (drawn from Lucas), municipal median income, proportion of municipality with university education, and racial fractionalization by municipality:

$$\alpha_k^{mun} \sim \mathcal{N}(\mu_k^{mun}, \sigma_k^2)$$

$$\mu_k^{mun} \sim \alpha_{l[i]}^{region} + \gamma_1 density_k + \gamma_2 logpop_k + \gamma_3 vs.con_k + \gamma_4 income_k + \gamma_5 educ_k + \gamma_6 race_k$$

Finally, we assume that region intercepts (BC, Prairies, Ontario, Quebec, Atlantic Canada) are drawn from a normal distribution with mean zero:

$$\alpha_l^{region} \sim \mathcal{N}(0, \sigma^2_{region})$$

We assume diffuse default priors for all γ parameters in study 2, and diffuse normal priors of $\mathcal{N}(0, 2.5)$ for all γ parameters in study 3. We use stan, as implemented in the rstanarm package in R, to generate estimates, drawing 2,000 samples from each of four chains following a warm-up period of 2,000 iterations. Post-estimation tests provide strong evidence of model convergence; R-hat values are 1.0 for all parameters, and traceplots show clear evidence of mixing.

Our model enables us to predict public support by age, sex, and education level in each municipality, which we then poststratify using the proportion of each municipality in each possible age-sex-education combination (these proportions are drawn from the 2016 Canadian census). We then match public opinion estimates to municipal politicians using census municipal identification codes.

4 Study 1 – Supplementary Details

4.1 Estimating the AMCEs

In figure 1 of the main text, the unit of analysis is the conjoint profile. Participants completed three iterations of the conjoint – with each iteration consisting of two profiles. Thus, each participant contributed up to six observations to the analysis. Standard errors are clustered at the participant-level to account for possible non-independence of observations within participants.

We estimate the General Public AMCEs in figure 1 by pooling responses to GenPop Waves 8 and 19. This yielded 23,588 observations from 3,952 unique participants. (The number of participants here differs from that noted in table A1 for two reasons: non-response to the conjoint questions and, in the case of Wave 19, discarding the responses of participants who had previously completed Wave 8.)

We estimate the Politician AMCEs in figure 1 by pooling the responses to three surveys: the Fed./Prov./Terr. Politicians Survey; the Municipal Politicians Survey; and the Ontario School Trustees survey. This yielded 3,808 observations from 690 unique participants. (The number of participants here differs from that noted in table A1 due to non-response to the conjoint questions.)

In table A3, we report the AMCEs for each of the five surveys separately.

Table A3: AMCEs by Survey

	Legislators	Municipal	Trustees	MEO Wave 8	MEO Wave 19
Phone Tracking					
(Base: Voluntary)					
Mandatory	-0.0853	-0.0884***	-0.106**	-0.0755***	-0.0649***
	(0.0659)	(0.0192)	(0.0392)	(0.00874)	(0.0113)
Schools					
(Base: Open)					
Closed	-0.0237	-0.0643**	0.00295	0.0233**	0.0299**
	(0.0548)	(0.0200)	(0.0376)	(0.00862)	(0.0113)
Businesses					
(Base: Open)					
Closed	-0.00862	-0.00898	-0.0530	0.00223	0.00246
	(0.0618)	(0.0188)	(0.0372)	(0.00815)	(0.0107)
Govt Services					
(Base: Open)					
Closed	-0.0840	-0.0213	-0.0927*	-0.00449	-0.0310**
	(0.0545)	(0.0187)	(0.0358)	(0.00831)	(0.0107)

Gatherings					
(Base: No limit)					
Max 5 people	0.0720	0.0766***	0.123**	0.0710***	0.0864***
	(0.0591)	(0.0186)	(0.0405)	(0.00860)	(0.0111)
Permission					
(Base: No)					
Yes	-0.141*	-0.107***	-0.139***	-0.102***	-0.111***
	(0.0550)	(0.0191)	(0.0408)	(0.00848)	(0.0108)
Govt Support					
(Base: Less)					
Same	-0.0266	0.0250	0.0979*	0.0331**	0.0497***
	(0.0829)	(0.0235)	(0.0408)	(0.0103)	(0.0130)
More	-0.0168	-0.0206	0.0864	0.00307	0.0164
	(0.0827)	(0.0233)	(0.0446)	(0.0102)	(0.0136)
Total Deaths					
(Base: 1000)					
2000	-0.00414	-0.0271	-0.00854	-0.0139	-0.0278
	(0.147)	(0.0420)	(0.0771)	(0.0182)	(0.0238)
3000	0.00990	-0.0381	-0.0202	-0.0600**	-0.0593*
	(0.130)	(0.0396)	(0.0897)	(0.0183)	(0.0235)
4000	-0.274	-0.0129	-0.141	-0.0621***	-0.0845***
	(0.166)	(0.0427)	(0.0859)	(0.0183)	(0.0233)
5000	-0.119	-0.0892*	-0.166*	-0.0975***	-0.0896***
	(0.166)	(0.0396)	(0.0758)	(0.0187)	(0.0241)
6000	-0.0914	-0.0866*	-0.189*	-0.135***	-0.112***
	(0.131)	(0.0427)	(0.0890)	(0.0187)	(0.0235)
7000	-0.184	-0.130**	-0.232**	-0.152***	-0.141***
	(0.140)	(0.0431)	(0.0768)	(0.0187)	(0.0239)
8000	-0.252	-0.188***	-0.200*	-0.190***	-0.191***
	(0.155)	(0.0431)	(0.0866)	(0.0190)	(0.0239)
9000	-0.223	-0.208***	-0.297***	-0.225***	-0.190***

	(0.162)	(0.0427)	(0.0803)	(0.0188)	(0.0238)
10000	-0.197	-0.237***	-0.203*	-0.236***	-0.198***
	(0.171)	(0.0401)	(0.0874)	(0.0191)	(0.0239)
Elderly Pct					
(Base: 70)					
80	0.140	-0.0132	-0.0190	-0.0204*	-0.00261
	(0.0896)	(0.0229)	(0.0446)	(0.0100)	(0.0131)
90	0.167*	-0.00525	-0.0830*	-0.0132	-0.00269
	(0.0826)	(0.0236)	(0.0415)	(0.0102)	(0.0132)
Constant	0.664***	0.715***	0.754***	0.660***	0.634***
	(0.150)	(0.0436)	(0.0821)	(0.0186)	(0.0242)
Observations	288	2786	734	15058	8530

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.2 Pre-Analysis Plan

We pre-registered with OSF our planned analysis of the conjoint experiment in study 1. The approach used in the pre-registered analysis differs from that reported in the main text. In the planned analysis, we committed to modeling whether the respondent chose the policy basket with the fewer deaths as a function of the costliness of policies in the fewer deaths profile – relative to costliness of policies in the higher deaths profile. Thus, each paired choice iteration constitutes the unit of analysis. This is in contrast to the AMCE approach taken in the main text, which treats each *profile* as the unit of analysis and models whether it was chosen as a function of its attributes (both approaches use standard errors clustered at the level of the survey participant.) Nevertheless, the substantive conclusions of both approaches are the same: namely, that the choices of politicians and citizens are closely aligned – with the exception of school closures. We chose to present in the main text the more traditional and more readily interpretable AMCEs.

In this subsection, we report the analysis as set out in our pre-registration. Table A4 reports the effects of the relative costliness of the policy attributes on the probability of choosing the fewer deaths profile. Figure A1 presents these same results graphically using the predicted probabilities generated from the model. Note that the number of observations here differs from that used in the main text analysis for three reasons. First, consistent with our pre-registration plan, we discarded the roughly 10% of observations in which the total deaths were the same in both profiles. Second, as noted above, by modeling the choice of the fewer deaths profile as a function of its relative costs, one iteration of the conjoint contributes only a single observation – unlike in the AMCE analysis in the main text where each iteration contributes two observations, one for each profile. Third, we added covariates capturing participants' party, gender, and age – again in keeping with the pre-registration

plan. Some participants' characteristics were missing (e.g., due to non-response) and their observations were discarded.

In each subplot of figure A1, the green line and shaded area represents results from the general public, and the orange line and shaded area represents results from elected politicians. The gently downward-sloping lines for both politicians and the public is in keeping with what we would expect: independent of other features of the conjoint, respondents were less likely to choose the fewer deaths scenario when the difference in expected deaths was small, when mobile phone tracking was more coercive, and when permission to leave home was more restrictive. For other policies, the change in predicted probability is flat – indicating that the presence or absence of a more aggressive option did not change the respondent's probability of selecting the fewer deaths scenario. In one instance, public gathering restrictions, respondents were more likely to select the fewer deaths scenario when it included the more aggressive policy option.

Figure A1 highlights the same alignment of preferences between politicians and citizens first illustrated in figure 1 in the main text. The slopes of the predicted probability lines in nearly every subplot are virtually identical to one another. Once again, in just one instance – school closures – do we see a statistically significant difference between politicians and the public. For politicians, school closures resemble mobile phone tracking or permission to leave home: they are less willing to chose the fewer deaths profile when the attribute is more restrictive. For the public, the opposite is true: a more aggressive schools policy in the fewer deaths scenario increases the probability that respondents in the general public will select it.

Table A4: Probability of Choosing Fewer Deaths Scenario For General Public and Politicians

	General Public	Politicians	Interaction
Phone Tracking			
Phone Tracking	-0.0752***	-0.0812***	-0.0752***
	(0.00708)	(0.0180)	(0.00709)
Politicians × Phone Tracking			-0.00600
			(0.0193)
Schools			
Schools	0.0281***	-0.0549**	0.0281***
	(0.00704)	(0.0191)	(0.00705)
Politicians × Schools			-0.0830***
			(0.0203)
Businesses			
Businesses	0.00653	-0.00557	0.00653
	(0.00665)	(0.0169)	(0.00666)

Politicians × Businesses			-0.0121
			(0.0180)
Govt Services			
Govt Services	-0.0133*	-0.0180	-0.0133*
	(0.00669)	(0.0176)	(0.00669)
Politicians × Govt Services			-0.00465
			(0.0187)
Gatherings			
Gatherings	0.0739***	0.0917***	0.0739***
	(0.00700)	(0.0190)	(0.00700)
Politicians × Gatherings			0.0178
			(0.0201)
Permission			
Permission	-0.105***	-0.133***	-0.105***
	(0.00674)	(0.0187)	(0.00675)
Politicians × Permission			-0.0283
			(0.0198)
Govt Support			
Govt Support	0.000688	0.000372	0.000688
	(0.00415)	(0.0108)	(0.00415)
Politicians × Govt Support			-0.000316
			(0.0115)
Total Deaths			
Est. Death	-0.00981***	-0.0144**	-0.00981***
	(0.00209)	(0.00532)	(0.00209)
Politicians × Est. Death			-0.00455
			(0.00569)
Elderly Pct			
Pct. Elderly	-0.00111	0.00472	-0.00111

	(0.00407)	(0.0108)	(0.00407)
Politicians × Pct. Elderly			0.00583
			(0.0115)
Party			
(Base: Liberal)			
Conservative	-0.0389**	-0.0992**	-0.0389**
	(0.0136)	(0.0358)	(0.0136)
NDP	0.0312	0.00208	0.0312
	(0.0179)	(0.0423)	(0.0179)
Other Party	0.00831	0.0238	0.00831
	(0.0188)	(0.0364)	(0.0188)
None-DK	0.0380**	0.0504	0.0380**
	(0.0145)	(0.0586)	(0.0145)
Politicians × Conservative			-0.0602
			(0.0381)
Politicians × NDP			-0.0292
			(0.0457)
Politicians × Other Party			0.0154
			(0.0408)
Politicians × None-DK			0.0125
			(0.0600)
Gender			
(Base: Male)			
Female	0.0235*	0.0902**	0.0235*
	(0.0104)	(0.0280)	(0.0104)
Other gender	-0.0521	-0.0265	-0.0521
	(0.0777)	(0.187)	(0.0777)
Politicians × Female			0.0667*
			(0.0297)
Politicians × Other gender			0.0256
			(0.202)

Age			
(Base: 65+ years)			
18-34yrs	-0.0241	-0.177*	-0.0241
	(0.0149)	(0.0718)	(0.0149)
35-44yrs	-0.0434**	-0.120*	-0.0434**
	(0.0167)	(0.0511)	(0.0167)
45-54yrs	-0.0215	-0.0702	-0.0215
	(0.0169)	(0.0374)	(0.0170)
55-64yrs	0.00339	-0.0494	0.00339
	(0.0160)	(0.0336)	(0.0160)
Politicians × 18-34yrs			-0.153*
			(0.0729)
Politicians × 35-44yrs			-0.0761
			(0.0535)
Politicians × 45-54yrs			-0.0487
			(0.0409)
Politicians × 55-64yrs			-0.0528
			(0.0370)
Participant Type			
(Base: General Public)			
Politicians			0.0239
			(0.0403)
Constant	0.581***	0.605***	0.581***
	(0.0154)	(0.0374)	(0.0154)
Observations	10627	1405	12032

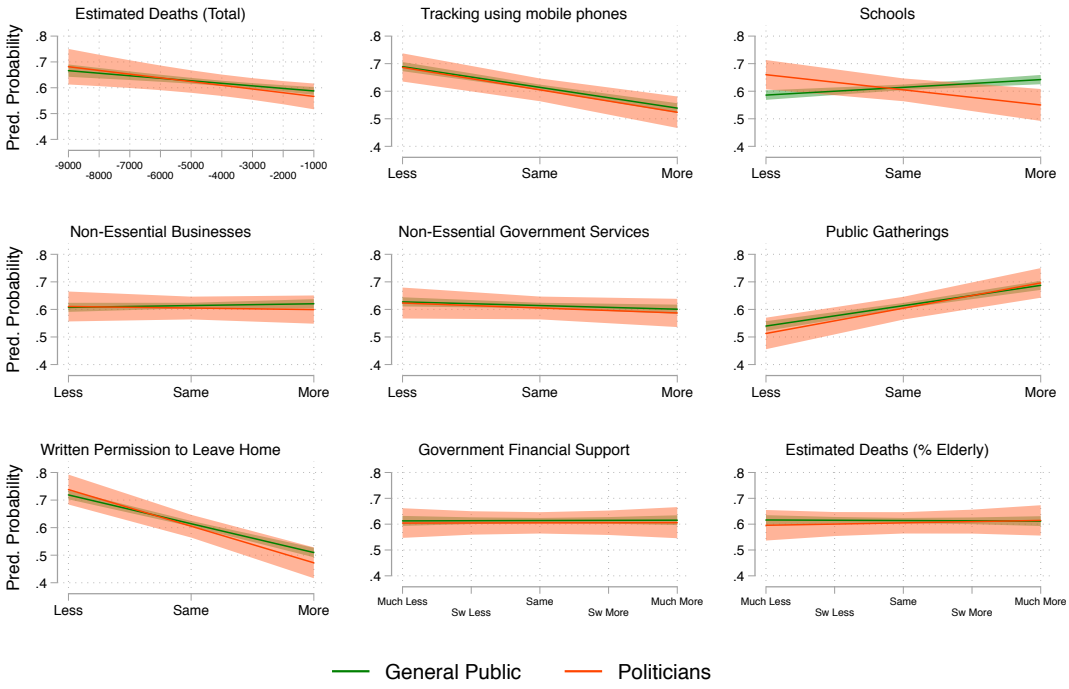
Includes all pairs with a difference in deaths.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5 Study 2 – Supplementary Details

5.1 Comparison Between Municipal Politicians and MRP Estimates

In the main text, we restrict our comparison between municipal politicians and local public opinion estimates to municipalities for which we have at least 10 public opinion respondents.



Note: This plot summarizes the probability of choosing the profile with the fewer deaths. The top-left plots reports the predicted probability of selecting the fewer deaths profile based on the difference in total expected deaths between the two scenarios (values closer to zero indicate a smaller difference in deaths between fewer and higher deaths profiles). The remaining plots report the predicted probability of selecting the fewer deaths profile based on the costliness of the policy/outcome in the fewer deaths scenario – relative to that in the higher deaths scenario.

Figure A1: **Predicted Probability of Choosing the Fewer Deaths Profile**

Using this restricted sample, we find that politicians select, on average, 0.36 more items than the public in their municipalities ($p<0.01$). Using the complete data (that is, even municipalities for which we have just one local response), we find that politicians select, on average, 0.21 more items than the public ($p<0.01$). Using an even more restricted dataset of only those municipalities with at least 30 public opinion responses, we find that politicians select, on average, 0.58 more items than the public ($p<0.01$). Thus the direction and substantive interpretation of our findings is robust to alternative approaches to the MRP comparison.

5.2 Politician Sample: Non-Response

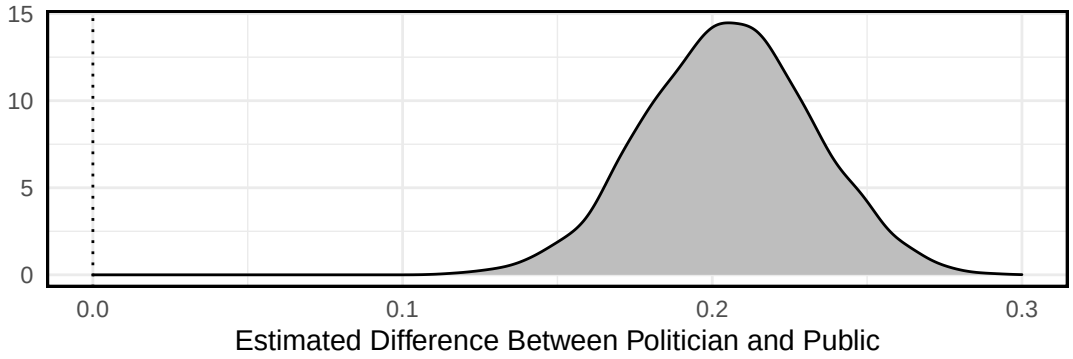
In the municipal survey, which we use in studies 2 and 3, we have a slight undersample of Quebec politicians and men. In study 2, we find that differences between politicians and constituents are positive in all subsamples: the difference in the Quebec-only sample is 0.3 (p=0.02), 0.22 in the men-only sample (p=0.01) and 0.21 in the women-only sample (p=0.04). Thus all subsample analyses indicate that the Quebec and male undersamples have little effect on our estimates.

To test the robustness of our findings to non-response effects among municipal politicians, we use a simulation approach to understand how different the non-sampled politicians (N$\sim$3,300) would need to be from the sampled politicians (N=417) in order to eliminate the positive effect we estimated in the main text. We run 100 simulations for each 0.01 increment from -0.2 to 0.2; for each simulation we draw simulated values for each of the 3,200 non-responding politicians from a normal distribution with a mean equal to the increment being simulated and a standard deviation of 1.155 (the observed standard deviation in the sample). We find that non-responding politicians would need to select, on average, 0.02 fewer items than the public before the probability of estimating a positive effect would drop below 50 percent. However, we find positive effects within nearly all subsamples of the municipal politician survey, as discussed above. For this reason, we are confident that our sample is sufficiently large and consistent that our findings are unlikely to be biased by differences between responding and non-responding politicians.

5.3 Uncertainty in Local Public Opinion Estimates

The Bayesian multilevel model that we employ in the first stage of our MRP procedure produces 4,000 samples from the posterior distribution of each parameter. For most purposes, these samples are typically replaced with a summary statistic, such as the median of the posterior distribution. However, an advantage of the fully Bayesian model is that it allows us to test the robustness of our findings by propagating uncertainty in the parameter estimates through subsequent analyses. In other words, we can test the robustness of our findings to plausible alternative estimates of public opinion in each municipality.

To undertake this robustness test, we randomly select 1,000 posterior draws, calculate municipal MRP estimates for each of the 1,000 draws, and summarize the difference between politicians and constituents for each draw. The results of this test, summarized in figure A2, confirm that the difference is always substantial and positive; politicians, on average, are willing to close more businesses or services than the public. The difference is statistically significant in 99.9% of the sampled posterior draws.



Note: Distribution of difference between politicians and constituents from 1,000 distinct MRP estimates of local public opinion in each municipality.

Figure A2: **Robustness to Public Opinion Estimate Uncertainty (Study 2)**

6 Study 3 – Supplementary Details

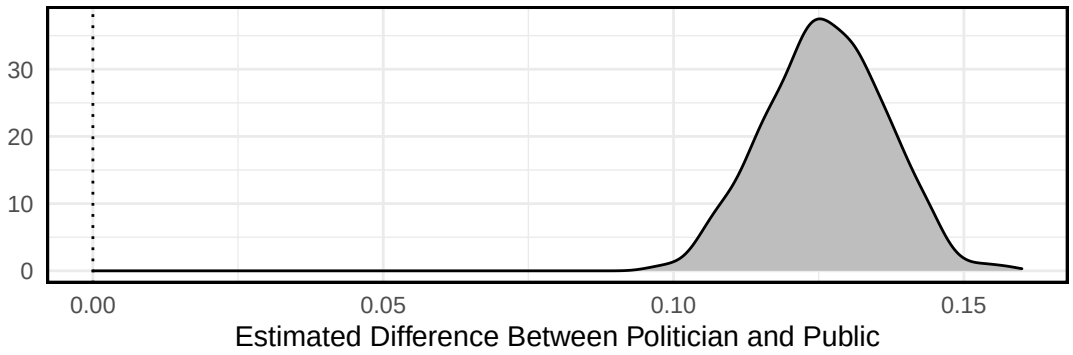
6.1 Comparison Between Municipal Politicians and MRP Estimates

In the main text, we restrict our comparison between municipal politicians and local public opinion estimates to municipalities for which we have at least 10 public opinion respondents. Using this restricted sample, we find that politicians overestimate public agreement with the "worth the risk" question by 13 percentage points. Using the complete data (that is, even municipalities for which we have just one local response), we find the same result: a 13 percentage point overestimate. Using an even more restricted dataset of only those municipalities with at least 30 public opinion responses, we find that the average overestimate increases slightly, to 14 percentage points. Thus the direction, size, and substantive interpretation of our findings is robust to alternative approaches to the MRP comparison.

6.2 Politician Sample: Non-Response

In study 3, we find that differences between politicians and constituents are again positive in all subsamples: the difference in the Quebec-only sample is 0.04 (p=0.02), 0.12 in the men-only sample (p<0.01), and 0.12 in the women-only sample (p<0.01). Note that the difference between politicians and the public in Quebec is statistically significantly lower than in other provinces. We thus expect that a fully representative sample of Quebec politicians is likely to have produced a slightly smaller overall difference between politicians and constituents than the one reported in the main text. However, all of our subsample analyses indicate that this difference would continue to be positive, statistically significant and substantively meaningful.

As in study 2, we use a simulation approach to test how different non-sampled municipal politicians (N∼3,300) would need to be from the sampled politicians (N=399) in order to eliminate the positive effect we estimated in the main text. We run 100 simulations for each 0.01 increment from -0.2 to 0.2; for each simulation we draw simulated values for each of the 3,200 non-responding politicians from a normal distribution with a mean equal



Note: Distribution of difference between politicians and constituents from 1,000 distinct MRP estimates of local public opinion in each municipality.

Figure A3: **Robustness to Public Opinion Estimate Uncertainty (Study 3)**

to the increment being simulated and a standard deviation of 0.2 (the observed standard deviation in the sample). We find that non-responding politicians would need to, on average, underestimate public agreement by 1% before the probability of estimating a positive effect would drop below 50 percent. However, we once again find positive effects (that is, substantial overestimates of public support) within nearly all subsamples of the municipal politician survey. For this reason, as in study 2, we are confident that our sample is sufficiently large and consistent that our findings are unlikely to be caused by differences between responding and non-responding politicians.

6.3 Uncertainty in Local Public Opinion Estimates

Following the same uncertainty propagation procedure described in the previous section, figure A3 summarizes the distribution of estimated differences between politicians' perceptions of public opinion and local estimates of public opinion for each of 1,000 draws. The difference is always substantial and positive. It is statistically significant in 100% of the sampled posterior draws.

7 Additional Information: Ethics Protocols

This research project involved human participants. Political elite and general public surveys were approved by [removed for review] Research Ethics Board. In this section, we describe our research procedures in relation to APSA Council's 2020 Principles and Guidance for Human Subjects Research.

None of the researchers involved in this study have any potential or perceived conflicts of interest in relation to this research. Participants in the survey of political elites were not compensated for their participation. Participants in the public opinion surveys were online panel members recruited by Dynata, a commercial survey sample firm. All participants were compensated in keeping with Dynata's recruitment policy. As is customary for commercial

sample providers, the exact terms of compensation are proprietary and were not shared with the researchers.

Consent. All participants provided informed consent prior to starting the online surveys, and were free to withdraw from the study at any time by closing their browsers. Informed consent documents were written in accessible language and are in compliance with the Government of Canada's Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS 2 2018).

Deception. This project did not involve deception.

Harm and trauma. Our surveys were assessed by [removed for review] as having minimal risk to participants. The participant pool was not primarily comprised of members of vulnerable or marginalized groups, and we did not anticipate differential benefits or harms for particular groups.

Confidentiality. Confidentiality was guaranteed to all participants. All replication data and code are anonymized to protect the confidentiality of both public and elite respondents.

Impact. Our research collected information on citizen and politician attitudes concerning COVID-19 policy and did not involve intervention in political processes.

Laws and Regulations. Our research complies with applicable laws and regulations on human subjects research in Canada.

Shared responsibility. All members of the research team, including research assistants, were aware of applicable ethics requirements and the necessity of protecting respondents' privacy and confidentiality.

Power. Respondents to public opinion surveys in our study were members of an online panel and their participation in the survey was entirely voluntary. For this reason, we are unaware of power imbalances that may have caused participants to feel compelled to participate. This is all the more true of our politician sample, which consisted of elected representatives across levels of government; these public figures are in positions of power and are unlikely to have experienced power imbalances in relation to a request to participate in a confidential academic survey.

References

Lucas, Jack. "Do 'Non-Partisan' Politicians Match the Partisanship of their Constituents?" *Urban Affairs Review* (2020).