Perceptions of Canadian Federal Policy Responses to COVID-19 among People with Disabilities and Chronic Health Conditions

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La présente étude porte sur la façon dont les personnes atteintes de handicap ou de maladie chronique — appartenant à un vaste groupe diversifié, souvent ignoré des politiques publiques canadiennes — interprètent la réaction du gouvernement fédéral canadien à la COVID-19. À l’aide de données nationales exclusives tirées d’un sondage en ligne effectué en juin 2020 (N = 1 027), nous analysons le point de vue des membres de ce groupe quant à la réaction globale du gouvernement. Bien que les résultats du sondage témoignent d’un large appui à la réaction du gouvernement fédéral à la pandémie, nos observations révèlent également des failles selon la nature du handicap et les particularités liées à l’état de santé, l’allégeance politique, la région et les expériences en ce qui a trait à la COVID-19. Entre autres éléments, l’allégeance au Parti libéral et le statut de bénéficiaire de la PCU se signalent comme étant associés à des points de vue plus positifs. Un examen plus approfondi des réactions qualitatives montre que ces points de vue sont également liés à des perspectives divergentes entourant les prestations et les dépenses gouvernementales, les divisions partisanes et autres clivages sociaux et culturels.

Mots clés : COVID-19, handicap, santé, allégeance politique, gouvernement fédéral

This study examines how people with disabilities and chronic health conditions — members of a large and diverse group often overlooked by Canadian public policy — are making sense of the Canadian federal government’s response to COVID-19. Using original national online survey data collected in June 2020 (N = 1,027), we investigate how members of this group view the government’s overall response. Although survey results show broad support for the federal government’s pandemic response, findings also indicate fractures based on disability type and specific health condition, political partisanship, region, and experiences with COVID-19. Among these, identification with the Liberal party and receipt of CERB stand out as associated with more positive views. Further examination of qualitative responses shows that these views are also linked to differing perspectives surrounding government benefits and spending, partisan divisions, and other social and cultural cleavages.

Keywords: COVID-19, disability, health, political partisanship, federal government
Introduction

Canadian policy responses to the COVID-19 pandemic are generally thought to have been swifter, more consistent, more widely implemented, better informed by health experts, and more cautious towards recovery than many other countries. Success has been attributed to a centralized rapid response facilitated by cross-partisan cooperation among federal and provincial leaders (Migone 2020; see also Howlett and Migone 2019).

Despite Canada’s early reputation as having successfully responded to the pandemic (Miller 2020; Roser et al. 2020; Wilson et al. 2020), the public’s views of the federal policy response vary across the country. Along with regional differences, individual experiences with COVID-19 and political preferences shape perceptions of the pandemic and the government’s response to it. These responses include social distancing policies undertaken to address COVID-19’s spread that ranged from closures and lockdowns to mask-wearing mandates and public handwashing campaigns. They also include early and swift income support polices, such as the Canada Emergency Response Benefit (a.k.a. CERB), meant to address the economic impacts of COVID-19 on the public at large. With these policies in place, not to mention variation in provincial discourse about the pandemic response, there was considerable variation in Canadians’ confidence in the federal government’s handling of the pandemic—from believing the government had not done enough to believing it had gone too far.

Although regional and partisan differences in support for the government’s response to COVID-19 are expected, members of different marginalized groups may also experience and respond to policy differently. This study focuses on the views of people with disabilities and chronic health conditions—a large marginalized group that already experiences significant employment and financial barriers, as well as obstacles to accessing social and health services. As the pandemic unfolded, the disproportionate impacts of the virus and the corresponding social distancing measures on already vulnerable and economically marginalized groups across Canada became increasingly apparent. This was especially true for people with disabilities and chronic health conditions. The effects of social, political, and economic factors on people with disabilities and chronic health conditions are ever more acute in times of crisis, given that health and disability status are key determinants of individuals’ experiences and life chances. It is also likely that policy perceptions vary within and among people with different disabilities and chronic health conditions.

Based on original data from a national online survey of 1,027 people with disabilities and chronic health conditions conducted in June 2020, we address several key questions. How do people with disabilities and chronic health conditions view the federal government’s response to COVID-19? Does support vary by specific disability and health condition? Is it connected to experiences with COVID-19? What other factors does support vary by including partisan preferences and regionality?

Our results contribute to the evolving understanding of the ways in which public policy responses to global health pandemics impact already vulnerable populations. We find that people with disabilities and chronic health conditions have been generally supportive of the federal government’s response to COVID-19, with 45 percent of respondents reporting positive ratings. However, respondents’ perceptions of the virus and of public policy responses also largely varied by disability type and health status, partisan political preferences, and region, illustrating that people with disabilities and chronic health conditions, often treated as a single homogenous group, are diverse in their public policy preferences. Although we expected respondents to view the pandemic through a lens heavily informed by their experiences with disability and health, and potentially membership in other status groups, we found that support was much more connected to larger political views and individual experiences with the virus itself.

We begin with a general discussion of the ways in which preexisting structural disadvantage is tied to disability and health status and the potential ways COVID-19 policy responses have exacerbated extant inequalities. We specifically outline how people with disabilities and chronic health conditions have been affected by COVID-19 and measures taken to combat its deleterious effects. We then discuss how extant disadvantage, experiences with COVID, regionality and partisan political preferences shape public perceptions of federal government pandemic responses.

Extant Inequality and Pandemic Policy Responses

Pandemics are shocks to the social system. Although they may generate new forms of disadvantage and inequality, they often amplify existing structural inequalities. Policy contexts play an important role in determining whether preexisting levels of inequality will increase during and following pandemics, shaping how different segments of society experience these crises and postcrisis recoveries. In that vein, the COVID-19 pandemic has highlighted policy shortcomings (Arcaya, Raker, and Waters 2020) and revealed the kinds of cumulative vulnerabilities that place certain groups such as disabled people and people with preexisting chronic health issues in greater social, health, and economic jeopardy (Olsson et al. 2015; Fothergill and Peek 2015; Hoffman, Shandas, and Pendleton 2020). Social scientists studying health have long pointed out that preexisting inequalities based on group status characteristics directly and indirectly determine health and other outcomes (Link and Phelan 1995, 2005; Morey 2018). This situation is no different.
Disability-Based Economic Inequality

As axes of inequality, disabilities and chronic health conditions are associated with low employment rates and earnings (Blanck et al. 2007; Maroto and Pettinicchio 2014b, 2015; Maroto, Pettinicchio, and Patterson 2019). Importantly, existing research shows considerable variation in employment outcomes depending on the nature of the disability. Individuals with cognitive disabilities are far more likely to experience negative labour market outcomes than individuals with respiratory and heart problems and physical disabilities (Jones 2011; Zwerling et al. 2002).

A major reason for poor labour market outcomes among people with disabilities is that they are disproportionately clustered in low-paying, precarious, nonstandard work, often in the food preparation and service industries (Maroto and Pettinicchio 2014a; Morris et al. 2018; Shuey and Jovic 2013). Workers with cognitive and multiple disabilities are most likely to be employed in these kinds of jobs, while those with sensory limitations are least likely to be (Maroto and Pettinicchio 2014a; Pettinicchio and Maroto 2020; Wall 2017). The pandemic has most severely affected sectors that people with disabilities tend to work in and, as a result, particularly harmed workers who were already struggling with low earnings and financial insecurity (Mather and Jarosz 2020).

Canadian households that have a member with a disability have less wealth and hold far fewer nonhome assets than those without a disability (Maroto 2016; Maroto and Pettinicchio 2020). Many of these individuals live on the poverty line and cannot rely on savings in times of crisis. This likely varies with the type and severity of disability, as these shape access to appropriate care and social support that facilitate maintaining steady income and covering higher costs of living. Over one million Canadians are registered with the Disability Tax Credit (DTC), which covers only a subset of disabled Canadians and is often required to access products such as the Registered Disability Savings Plan (RDSP), meant to mitigate financial insecurity. About 40 percent of individuals registered with DTC list mental functional limitations, and many on DTC for an indeterminate time are experiencing difficulties in daily independent living activities (Canada Revenue Agency 2019). Although RDSPs are meant to encourage savings, program rules have been criticized for having the opposite effect and for assuming individuals with few financial resources have any money to save.

COVID-19 Policy Responses

As British Columbia, Alberta, Québec, and Ontario saw a rapidly increasing number of COVID-19 cases in March 2020 (Canadian Press 2020a), the federal government sought to address threats to healthcare system capacity (Canadian Press 2020c), embarked on massive national information dissemination campaigns about the virus and ways to reduce risk, including new protective and social distancing measures, and promised direct financial aid to Canadians, namely via the taxable wage subsidy known as the Canada Emergency Response Benefit (CERB).

CERB, which was extended twice through the spring and summer of 2020, was limited to employed Canadians who had lost all or some income as a direct result of COVID-19. This means that individuals, including many people with disabilities and others with chronic health conditions, already struggling to find work before the pandemic, could not benefit from CERB (Leoppy 2020). In the fall, CERB was rolled into Employment Insurance, offering Canadians a credit of insured hours, but this again remained problematic for the many disabled Canadians who did not previously qualify for CERB. Instead, federal economic policies meant to aid Canadians with disabilities during the pandemic have been relying on enhanced Goods and Services Tax (GST) payments to cover rising costs. More recently, those with a valid DTC certificate were automatically issued a one-time nontaxable $600 payment. In July, the government expanded this program to include an additional 1.7 million Canadians with disabilities who already receive either a CPP disability benefit or disability support through Veterans Affairs Canada (Canada 2020a).

The continuously unfolding pandemic raises the issue of how changing policy responses and programmatic rules are understood among already vulnerable groups who not only face a higher risk of getting the virus, but also face uncertain economic futures. Disadvantaged groups including people with disabilities and chronic health conditions do not have equal access to health resources, social programs, and financial information (Chen et al. 2018; Pennycook et al. 2020; Van Rooij, Lusardi, and Alessie 2011) which influences how they perceive policy responses.

Varying Attitudes towards Policy Responses

Although most Canadians support most measures taken to combat the coronavirus (Maru/Blue Public Opinion 2021), policy responses to the pandemic in Canada have fundamentally restricted everyday life activities, posing greater limitations for certain groups that no doubt affect how individuals view government. Views regarding any government’s response to COVID-19 will likely vary across factors that include people’s specific situation and demographics, their existing partisan beliefs, and their experiences with the pandemic. Although together they compose one of the groups most vulnerable to the virus, people with disabilities and chronic health conditions include a broad range of individuals with different disabilities, health conditions, demographics, and political perspectives. We examine variability in attitudes towards COVID-19 policy responses based on specific disabilities and health conditions, experiences with COVID-19, and broader partisan views and regional differences.
**Disability and Health Status during the Pandemic**

Varying disability and health statuses shape experiences with and attitudes towards government institutions and policy. In addition to being left out of income support programs (Shakeri 2020), individuals with respiratory issues, those who experience debilitating panic attacks, people on the autism spectrum, and people who rely on lip-reading to effectively communicate experienced significant problems adhering to protective guidelines and were provided with few resources and guidelines by public officials (Aslam, Hall, and the Canadian Press 2020; Canadian Press 2020b). Against a backdrop of the crisis still unfolding in long-term care facilities, many people with more severe disabilities who require in-home visits from care workers were not receiving this support (see Choi 2020) and social distancing and isolation measures have increasingly been shown to have deleterious effects on individuals already struggling with health and mental health issues (Emerson et al. 2020; Vigo et al. 2020). Thus, attitudes towards COVID-19 policy responses reflect extant experiences under new and continuously unfolding health and socioeconomic scenarios.

Perceptions of policy fairness, whether about disparate impacts of social distancing measures or economic impacts and burdens unduly placed on those already financially strained, have a direct bearing on public attitudes towards government responses and subsequent public action (Han et al. 2020). Individuals struggling economically because of their health and disability status tend to have more negative perceptions of policy because they see themselves as victims of unjust inequalities (Mattila 2020; see also Corcoran, Pettinicchio, and Young 2011, 2015). Social distancing and protective and lockdown measures, as well as being left out of income support programs, could be seen as imposing unequal burdens and as ignoring already economically vulnerable groups. This may shape short- and long-term policy perceptions and attitudes towards government (Mattila 2020).

**Political Partisanship and Regional Variation**

Public perceptions are also shaped by how Canadian policymakers collectively frame and define rapidly unfolding issues (Migone 2020; Howlett and Migone 2019; Pettinicchio 2017; 2019) and the ways in which these are communicated. They may signal consensus on providing income supports (which in the case of CERB led to a swift government response), but disagreement on how to approach lockdowns. The extent to which officials appear to be transparent, clear, and consistent with their messaging shapes public attitudes (Driedger, Maier, and Jardine 2018; Quinn et al. 2013; Sheluchin, Johnston, and van der Linden 2020; Taha, Matheson, and Anisman 2013). Merkley et al. (2020) described a “cross-partisan consensus” among Canadian political elites that explains a lack of partisanship in public attitudes and behaviours. In this vein, COVID-19 is thought to be largely apolitical in Canada, where no one party challenged policies but, rather, parties rallied around the role of experts from the start.

Nonetheless, Pennycook and colleagues (2020) show that partisan attitudes significantly shaped how Canadians responded to the pandemic and to policies meant to address it. And even Merkley et al. (2020) found a relationship between party affiliation and perceptions of severity in Canada, where Conservatives viewed the pandemic as less severe. However, Bol et al. (2021) found that pandemic-related lockdowns increased support for those in power and confidence in government, perhaps because the public saw the government taking necessary measures to keep citizens safe.

Recent studies have focused on consensus among political elites (Merkley et al. 2020; Pennycook et al. 2020), but this cross-partisanship may not overlap neatly with partisan differences in how the Canadian public assesses federal government responses to the pandemic. This potential disconnect between elite and public policy preferences may reflect growing political polarization among the Canadian public more generally (Cochrane 2015; Pettinicchio 2010). Kevins and Soroka (2018) show that partisan sorting on attitudes to redistribution in Canada has increased substantially over the past two decades. In addition, deep historical regional divisions are clearly embodied within the newly formed “Wexit” or “Maverick” party pushing for Western Canadian sovereignty (Dryden 2020). Regional divides are especially evident in Québec and in the Prairie Provinces, which further complicates the link between public preferences and government responses to the pandemic (Baer, Grabb, and Johnston 1993; Wiseman 2007).

Thus, while health pandemics can act as critical moments in shifting public perceptions of politics and policy translating these attitudes into actions and behaviour (Liu and Mehta 2020; Merkeley et al. 2020), individuals still draw from personal experiences and long-held partisan preferences in understanding pandemic policy responses. With that, we examine support for overall federal government responses to COVID-19 among people with disabilities and chronic health conditions, a diverse but marginalized group that tends to be underrepresented in public policy research. We focus on differences by disability and condition type, political affiliation, region, and experiences with COVID-19 to better understand how each of these factors can drive public perceptions of government policy and policy-makers in times of crisis.

**Data**

Data come from a quota-based online survey administered from 11 to 22 June 2020, just as many cities and provinces across Canada were beginning to end their lockdowns and open up their economies. We relied on Qualtrics,
an Internet-based survey research company that uses paid panels of respondents, to help obtain a sample of people with disabilities and health conditions across the country. In addition to payment received from the survey company, we provided respondents with $10 Amazon.ca gift cards.

The survey includes 1,027 respondents age 18 and older who reported having one or more disabilities or health conditions. Disabilities include physical, cognitive, vision, hearing, and emotional limitations based on a set of six questions. We also included a category related to “other” conditions lasting six months or longer. To gauge the severity of different disabilities, respondents were given options of answering, “never,” “sometimes,” “often,” or “always” to each of these questions. Health conditions included asthma, cancer, chronic kidney disease, chronic respiratory disease, diabetes, heart disease, hypertension, obesity, and being immunocompromised. Questions asking about disability were based on the Canadian Survey on Disability (Cloutier, Grondin, and Levesque 2018) and guidance provided by the World Health Organization and the Washington Group on Disability Statistics. Health conditions were chosen based on those indicated by the Government of Canada as increasing vulnerability to COVID-19 (Canada 2020b).

Data were collected via quota-based sampling to ensure that we obtained a representative sample across provinces, with 38 percent of responses from Ontario, 23 percent from Québec, 13 percent from British Columbia, 18 percent from the Prairie Provinces (Alberta, Manitoba, Saskatchewan), and 7 percent from the Atlantic Provinces (Newfoundland and Labrador, New Brunswick, Nova Scotia, and Prince Edward Island), based on 2016 Census population estimates (Statistics Canada 2017). We choose not to include any other characteristics within our quotas or weight our data after collection. In particular, we did not use poststratification, a weighting method commonly used when analyzing data from web-based surveys to adjust for undercoverage, nonresponse, and self-selection in the sample (Bethlehem 2010; Schonlau et al. 2009). This method uses auxiliary information on true population values, from census data or probability-based surveys, to generate weights that can be applied to each respondent in a web-based survey so that the sample as a whole better represents the population. However, this procedure requires the distribution of characteristics in a population to be known. In our case, it was unclear on which population characteristics we should base any weights, since there have been no other random surveys of individuals with disabilities and chronic health conditions. However, many of the characteristics of this group (e.g., age, gender, and education) mirror those for individuals sampled in the Canadian Survey on Disability and the Canadian Community Health Survey. We note such comparisons in the discussion of our descriptive statistics. Please see Appendix A for a descriptive overview of our sample and online Appendix B for a comparison with the 2017–18 CCHS data.

**Measures and Methods**

We analyze respondents’ views of the federal government’s response to COVID-19 as our key outcome variable. Specifically, respondents were asked, “In general, how would you rate the federal government’s response to COVID-19?” We asked respondents to provide a rating on a scale of 0–10 (0 being the lowest, 10 being the highest) and then further elaborate on that rating in an open-ended question. We combined results into the three following categories: negative assessment (score of 0–4), neutral assessment (score of 5–7), and positive assessment (score of 8–10).

We then analyzed this outcome using a set of multinomial logistic regression models. Multinomial models expand on basic logistic regression models to allow for the inclusion of outcome variables with multiple categories. Within these models, the probability of membership in each category is compared with the probability of membership in a designated reference category (Liao 1994; Menard 2002). Additionally, by interpreting our results as average marginal effects and predicted probabilities, we are able to show the estimated difference in the probability of reporting the specified level of support for government responses when all other options are considered. Standard errors account for clustering by province. All models include demographic and economic control variables.

Our first set of predictor variables focuses on variation by disability and chronic health condition type. We include variables for six disabilities. The first four measure whether the respondent reported having any difficulty seeing (even when wearing glasses or contact lenses); hearing (even when using a hearing aid); walking, using stairs, using the hands or fingers, or doing other physical activities; and learning, remembering, or concentrating. Two other variables measure whether the respondent reported any emotional, psychological, or mental health conditions and any other health problems or long-term conditions that had lasted or were expected to last for six months or more. Disability-related questions also allowed respondents to indicate the severity of their disability by responding “never,” “sometimes,” “often,” or “always.” We focus on more severe disabilities and code respondents who indicated they *often or always* experienced the outcomes as reporting that disability.

We classified chronic health conditions based on whether the respondent indicated the presence of the nine following conditions: asthma; cancer; chronic kidney disease; chronic respiratory or lung disease; diabetes; hypertension; heart disease; immunocompromised; or obesity. Answers were obtained from a single question, worded as follows: “Do you presently have any of the following health conditions? Please mark all that apply.”

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Our second set of predictor variables focus on political partisanship and region. *Political party* includes four categories for the major political parties: Liberal Party (referent), Conservative Party, New Democratic Party, and Other or No Party. *Province/region* includes categories of Ontario (referent), Québec, British Columbia, Prairie Provinces (Alberta, Manitoba, and Saskatchewan), and Atlantic provinces (Newfoundland and Labrador, New Brunswick, Prince Edward Island, and Nova Scotia).

To assess experiences with COVID-19 in a third set of predictor variables, we include a series of composite variables measuring *COVID-19 expenses*, *informed about COVID-19*, and *concerned about COVID-19*. Composite variables combine the results of multiple variables measured on the same or similar scales, facilitating comparison. We use a process of meaningful grouping and averaging. We also include dichotomous variables measuring whether the respondent *applied for CERB* and whether a respondent’s *financial situation has worsened* during the pandemic.

*COVID-19 expenses* is a composite variable assessing the economic effects of COVID-19 on the respondent’s finances. It comprises responses to the following five questions: “Since COVID-19 restrictions have been put in place, have you had to (a) spend from savings to make ends meet, (b) use credit cards for essential expenses, (c) take out loans to pay for essential expenses, (d) contact a financial institution to request mortgage or loan payment deferrals, and (d) rely on government programs like, but not exclusively, CERB to make ends meet.” Values for the composite variable are the respondent’s average across these questions, which we measured as binary (0 = no, 1 = yes) responses with $\alpha = 0.664$.

The *COVID-19 information composite variable* assesses how informed the respondent is about COVID-19. It includes responses to the following four questions: “How informed do you believe you are about (a) access to COVID-19 testing, (b) how to get treatment for COVID-19, (c) COVID-19 symptoms, and (d) what to do if you suspect you have COVID-19.” Original variable values were un-informed (0), somewhat informed (1), and very informed (2). Composite variable scores are the respondents’ averages with $\alpha = 0.797$.

The *COVID-19 concerned variable* includes responses for the following seven questions: “How concerned are you with (a) contracting COVID-19 yourself, (b) a friend or family member contracting COVID-19, (c) paying your bills, (d) keeping your job, (e) finishing your degree, (f) accessing healthcare, and (g) shopping for essential goods. Original variable values were not concerned (0), somewhat concerned (1), and very concerned (2). Composite variable scores are the respondent’s averages with $\alpha = 0.799$.

In addition to our quantitative ratings of federal government responses to COVID-19, we analyzed qualitative responses to an open-ended survey question asking respondents to explain why they provided the ratings they did. Specifically, respondents were asked, “Why did you select that score?” after choosing a rating. We inductively coded responses to these open-ended questions and identified emergent themes associated with reasons respondents gave for their quantitative assessments of policy responses. We also linked the codes associated with respondents’ qualitative responses to their demographic and attitudinal characteristics to help contextualize their reasoning.

**Findings**

We found broad support for the federal government’s response to COVID-19. Most respondents thought that the federal government was doing a good job addressing the pandemic. As shown in Table 1, the average score for the federal government was 6.84 with 13.24 percent of respondents rating their response negatively, 42.06 percent giving it a neutral rating, and 44.69 percent giving it a positive rating. Examining differences across key variables shows a potential relationship with some disabilities and chronic health conditions. Scores also tended to be lower among respondents affiliated with the Conservative Party, those living in the Prairie Provinces, and those who reported worsening financial situations.

When asked why they provided a certain rating, most individuals did not elaborate upon their quantitative assessments of government responses to COVID-19. Many qualitative responses involved restating a numerical assessment in words without any further elaboration, as in the case of statements like “The government is doing [a] very good job,” “Sickening Response,” and “I think the job they did was fine but it should have been a lot better.” Other respondents framed their assessments in terms of preconceived expectations of how the government would handle a pandemic although not necessarily referring to any specific government policy or action. Their responses encompassed a range from “seems like they could be doing more” to “surprisingly great.”

Importantly, some respondents indicated that they were unable to provide further justification because they admittedly lacked knowledge about government responses. Statements such as “I do not [know] enough about what the government is doing in this case to make a comment” and “I don’t follow the news” point to attitudes and beliefs that cannot be readily articulated. This suggests not only that respondents lacked specific information about government actions related to COVID-19 even in the most general sense but also that, relatedly, their assessments may be based on other kinds of information including pre-existing beliefs about government, partisan preferences, and their own experiences throughout the pandemic.

Table 2 presents the results from multinomial logit models predicting respondents’ views of the federal
Table 1: Descriptive Results for Support for Government Response (N = 1,027 Adults)

| Variable                          | Mean  | Negative (Score 0–4) | Neutral (Score 5–7) | Positive (Score 8–10) |
|-----------------------------------|-------|----------------------|---------------------|-----------------------|
| Overall                           | 6.84  | 13.24                | 42.06               | 44.69                 |
| Disability type                   |       |                      |                     |                       |
| Physical disability               | 7.15  | 9.16                 | 41.22               | 49.62                 |
| Cognitive disability              | 6.53  | 17.19                | 38.28               | 44.53                 |
| Emotional disability              | 6.63  | 14.13                | 44.24               | 41.64                 |
| Vision disability                 | 6.98  | 14.17                | 37.50               | 48.33                 |
| Hearing disability                | 6.70  | 18.52                | 33.33               | 48.15                 |
| Other disability                  | 6.72  | 15.26                | 39.91               | 44.84                 |
| Chronic health condition          |       |                      |                     |                       |
| Asthma                            | 6.85  | 12.05                | 44.18               | 43.78                 |
| Cancer                            | 7.05  | 11.90                | 33.33               | 54.76                 |
| Chronic kidney disease            | 7.19  | 6.25                 | 43.75               | 50.00                 |
| Chronic respiratory or lung disease| 6.78  | 12.96                | 48.15               | 38.89                 |
| Diabetes                          | 7.10  | 11.07                | 38.17               | 50.76                 |
| Hypertension                      | 7.07  | 12.22                | 38.91               | 48.87                 |
| Obesity                           | 6.95  | 12.88                | 37.42               | 49.69                 |
| Immunocompromised                 | 6.61  | 17.65                | 45.10               | 37.25                 |
| Heart disease                     | 7.04  | 12.50                | 39.29               | 48.21                 |
| Political party affiliation       |       |                      |                     |                       |
| Liberal Party                     | 7.86  | 3.16                 | 34.74               | 62.11                 |
| Conservative Party                | 5.56  | 29.73                | 44.59               | 25.68                 |
| New Democratic Party              | 7.03  | 10.00                | 42.78               | 47.22                 |
| Other                             | 6.27  | 16.33                | 50.61               | 33.06                 |
| Region                            |       |                      |                     |                       |
| Ontario                           | 6.79  | 12.78                | 42.86               | 44.36                 |
| Quebec                            | 6.97  | 11.30                | 44.78               | 43.91                 |
| British Columbia                  | 7.12  | 8.96                 | 45.52               | 45.52                 |
| Prairie Provinces                 | 6.45  | 20.60                | 36.18               | 43.22                 |
| Atlantic Provinces                | 7.28  | 9.23                 | 38.46               | 52.31                 |
| Applied for CERB                  |       |                      |                     |                       |
| No                                | 6.80  | 13.90                | 41.94               | 44.17                 |
| Yes                               | 6.96  | 10.86                | 42.53               | 46.61                 |
| Worsening financial situation     |       |                      |                     |                       |
| No                                | 7.06  | 10.84                | 41.16               | 48.00                 |
| Yes                               | 6.17  | 20.63                | 44.84               | 34.52                 |

Notes: Answers to questions: In general, how would you rate the federal government’s response to COVID-19?

Source: 2020 COVID-19 Response Survey of People with Disabilities and Health Conditions.

government’s response to COVID-19. We report model coefficients as average marginal effects for each of the three categories of negative, neutral, or positive. Coefficients can be interpreted as a percentage point change in the probability of falling into the specified category associated with a change in the specified predictor variable. Original model coefficients are available in online Appendix C.

Results in Table 2 show that respondents’ support for the federal government’s response to COVID-19 was largely driven by partisanship, region, and COVID-19 experiences, with a few differences by disability and chronic health condition type. We therefore focus our interpretation on these variables and further illustrate these results in Figures 1, 2, and 3. These figures plot the predicted probabilities of reporting a negative, neutral, or positive response associated with different levels of these key predictor variables. Figure 1 includes disability and health condition, Figure 2 includes partisan preferences and region, and Figure 3 includes COVID-19 experiences. Categories are listed for categorical variables. Three levels of low, mean, and high are listed for the continuous variables. These refer to values at the mean and one standard deviation above and below the mean. Results come from models with all control variables.
Table 2: Results from Multinomial Logistic Regression Models Predicting Three Categories of Federal Response Views (N = 1,027 Adults)

| Variable                                | Negative AME (SE) | Negative SE | Neutral AME (SE) | Neutral SE | Positive AME (SE) | Positive SE |
|------------------------------------------|------------------|-------------|------------------|------------|-------------------|-------------|
| Physical disability                     | −0.069*** (0.014) | 0.042 (0.048) | 0.028 (0.043)    |            |                   |             |
| Cognitive disability                    | 0.041*** (0.008)  | −0.085 (0.047) | 0.043 (0.047)    |            |                   |             |
| Emotional disability                    | −0.036 (0.027)    | −0.016 (0.050) | 0.052 (0.027)    |            |                   |             |
| Vision disability                       | 0.028 (0.024)     | −0.065 (0.034) | 0.038 (0.042)    |            |                   |             |
| Hearing disability                      | 0.087 (0.056)     | −0.046 (0.047) | −0.041 (0.030)   |            |                   |             |
| Other disability                        | 0.061*** (0.011)  | −0.009 (0.016) | −0.053*** (0.015)|            |                   |             |
| Asthma                                  | −0.015 (0.010)    | 0.002 (0.021)  | 0.013 (0.030)    |            |                   |             |
| Cancer                                  | −0.037 (0.038)    | −0.037 (0.030) | 0.074 (0.049)    |            |                   |             |
| Chronic kidney disease                  | −0.088* (0.044)   | 0.068 (0.037)  | 0.020 (0.053)    |            |                   |             |
| Chronic respiratory or lung disease     | −0.027 (0.034)    | 0.109 (0.120)  | −0.081 (0.139)   |            |                   |             |
| Diabetes                                | −0.049** (0.016)  | −0.007 (0.040) | 0.057 (0.051)    |            |                   |             |
| Hypertension                            | −0.008 (0.057)    | 0.025 (0.032)  | −0.017 (0.031)   |            |                   |             |
| Obesity                                 | 0.011 (0.050)     | −0.064 (0.041) | 0.053 (0.044)    |            |                   |             |
| Immunocompromised                       | 0.055 (0.041)     | −0.004 (0.055) | −0.051 (0.039)   |            |                   |             |
| Heart disease                           | −0.011 (0.046)    | 0.028 (0.045)  | −0.017 (0.021)   |            |                   |             |
| Age                                     | −0.001 (0.001)    | −0.005* (0.003)| 0.006* (0.002)   |            |                   |             |
| Gender (Ref: Male)                      | −0.061**** (0.015)| 0.061 (0.052)  | 0.000 (0.038)    |            |                   |             |
| Other                                   | −0.029 (0.134)    | −0.059 (0.128)| 0.087 (0.094)    |            |                   |             |
| Marital status (Ref: Never married)     |                   |             |                   |            |                   |             |
| Cohabiting                              | 0.005 (0.011)     | 0.062 (0.052)  | −0.068 (0.052)   |            |                   |             |
| Married                                 | −0.018 (0.028)    | 0.068 (0.037)  | −0.050 (0.034)   |            |                   |             |
| Formerly married                        | 0.000 (0.033)     | 0.016 (0.031)  | −0.015 (0.060)   |            |                   |             |
| Any children                            | −0.012 (0.011)    | 0.001 (0.062)  | 0.011 (0.054)    |            |                   |             |
| Non-white                               | −0.057** (0.021)  | 0.071* (0.036)| −0.014 (0.021)   |            |                   |             |
| > Bachelor’s degree                     | 0.013 (0.010)     | −0.085*** (0.021)| 0.071*** (0.022)|            |                   |             |
| Employment status (Ref: Employed, full-time) |                   |             |                   |            |                   |             |
| Employed, part-time                     | 0.025 (0.014)     | −0.016 (0.061)| −0.009 (0.063)   |            |                   |             |
| Unemployed                              | 0.105 (0.056)     | −0.010 (0.060)| −0.094 (0.071)   |            |                   |             |
| Not in labour force                     | 0.000 (0.016)     | 0.061 (0.036)  | −0.061 (0.034)   |            |                   |             |
| Own home                                | −0.003 (0.019)    | −0.010 (0.017)| 0.013 (0.013)    |            |                   |             |
| Financial situation worse than previous year | 0.038*** (0.014)| 0.038 (0.020)| −0.076*** (0.017)|            |                   |             |
| Political party (Ref: Liberal Party)    |                   |             |                   |            |                   |             |
| Conservative Party                      | 0.260*** (0.037)  | 0.106 (0.059)| −0.366*** (0.041)|            |                   |             |
| New Democratic Party                    | 0.059*** (0.013)  | 0.048 (0.051)| −0.106 (0.061)   |            |                   |             |
| Other                                   | 0.123*** (0.024)  | 0.118 (0.069)| −0.242*** (0.075)|            |                   |             |
| Province/Region (Ref: Ontario)           |                   |             |                   |            |                   |             |
| Quebec                                  | 0.011 (0.010)     | 0.001 (0.016)  | −0.012 (0.013)   |            |                   |             |
| British Columbia                        | −0.030*** (0.007) | 0.012 (0.008)| 0.018*** (0.006)|            |                   |             |
| Prairie Provinces                       | 0.032*** (0.008)  | −0.087*** (0.010)| 0.055*** (0.005)|            |                   |             |
| Atlantic Provinces                      | −0.038*** (0.007) | −0.012 (0.012)| 0.05*** (0.017) |            |                   |             |
| COVID-19 expenses                       | 0.019 (0.042)     | −0.056 (0.096)| 0.037 (0.069)    |            |                   |             |
| Informed about COVID-19                 | −0.040** (0.012)  | −0.121*** (0.033)| 0.16*** (0.037)|            |                   |             |
| Concerned about COVID-19                | 0.007 (0.022)     | −0.036 (0.067)| 0.029 (0.048)    |            |                   |             |
| Applied for CERB                        | −0.054* (0.021)   | −0.027 (0.047)| 0.08*** (0.031)  |            |                   |             |
| Pseudo R²                               | 0.141             | 0.141         | 0.141            |            |                   |             |

Notes: Multinomial logistic regression models predicting probability of negative, neutral, or positive perceptions of government COVID-19 response. Continuous variables are mean centred. AME refers to average marginal effects, which can be interpreted as percentage point changes in the probability of the outcome category associated with a unit change in the predictor variable. Standard errors are in parentheses.

*** p < 0.001; ** p < 0.01; * p < 0.05.

Source: 2020 COVID-19 Response Survey of People with Disabilities and Health Conditions.
Figure 1: Predicted Probabilities from Multinomial Logistic Regression Models Predicting Three Categories of Federal Response Views by Type of Disability and Chronic Health Condition (N = 1,027 Adults)

Note: Predicted probabilities based on models in Table 2.

Source: 2020 COVID-19 Response Survey of People with Disabilities and Health Conditions.

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Type of Disability and Chronic Health Condition

Comparing results by specific disabilities and chronic health conditions, Table 2 and Figure 1 show that there is not much variation in support for the federal government’s response to COVID-19 across these variables. However, a few groups do stand out. People with physical disabilities tended to view the government response more positively than people with other types of disabilities. For instance, only 7.4 percent reported a negative response, compared with 10–22 percent of people reporting other disabilities. Percentages with a positive response, however, were more similar across disabilities. In terms of health conditions, people with chronic kidney conditions, diabetes, or cancer were the least likely to report a negative response.

Qualitative responses provide limited insight into the reasons behind observed differences in support between these disability groups. Respondents generally did not explain their assessments with reference to their disability or health status, suggesting that these were not key considerations when evaluating government responses. Occasionally, however, justifications referenced vulnerable groups seen as having received insufficient attention and support. In these comments, respondents discussed how the government had not done enough to help vulnerable Canadians, including those with disabilities. Numerous respondents mentioned that existing supports were not helping everyone in need, “insufficient,” and constituted a poorly thought out “patchwork” of programs.

Political Partisanship and Region

Specific partisan differences were most evident when negative responses in Table 2 were considered. Compared with respondents who identified with or supported the Liberal Party, Conservative Party supporters were 26.0 percentage points more likely to have a negative assessment of the federal government’s response, NDP members were 5.9 percentage points more likely, and members of other parties were 12.3 percentage points more likely. Conservative Party supporters were also 36.6 percentage points less likely to have positive responses.

Comparing political parties in Figure 2, Liberals were the most likely group to provide a positive assessment of the federal government’s response, perhaps not surprisingly with a Liberal minority government led by Justin Trudeau. Conservatives stood out with the greatest proportion having a negative response; 19.4 percent rated the federal government negatively compared with 3–9 percent of Liberals and NDP members. Conservatives were also
much less likely to have a positive response, with 23.8 percent rating the government positively. Across regions, the Prairie Provinces stood out as having lower ratings of the federal government’s response to COVID-19. Respondents in the Prairie Provinces were 3.2 percentage points more likely to provide a negative response and 8.7 percentage points less likely to give a neutral response, but they were also 5.5 percentage points more likely to provide a positive response than those in Ontario (Table 2). Overall, 16.1 percent of prairie residents rated the response as negative. However, the significant difference here was with those reporting neutral responses; 35.0 percent of respondents in the prairies provided a neutral response compared with 42–45 percent in the other provinces, suggesting more polarized views of the federal government in that region.

Open-ended responses provided further insight into how partisanship shapes attitudes about the federal response to COVID-19, with fewer patterns present across regions. Although some respondents, mostly those identifying with the Conservative Party, expressed concerns about policies limiting basic freedoms and that the pandemic is being blown out of proportion, these were a very small minority.

Rather, quite common among negative assessments was the belief that federal economic responses to COVID-19 constituted an irresponsible, wasteful use of taxpayer money that would add too much to the federal budget deficit. A familiar “small-c” conservative critique of “small-l” liberal fiscal policies, this kind of response was especially common among respondents who identified with the Conservative Party. Criticisms from Conservative respondents regularly implicated Prime Minister Justin Trudeau directly: “the PM keeps giving away money that the country does not have,” “I haven’t been impressed with the way Justin has been throwing money around with no real oversight,” and “Trudeau has gone crazy giving away so much money.” Concerns about spending, the deficit, and the fear of higher taxes in the future were expressed by members of other parties as well.

More specifically, Conservative respondents also expressed concern that federal funds were being used to pay benefits to those who did not qualify or were otherwise undeserving. For example, even though CERB is taxable income, one respondent explained, “They’ve been doing a decent job however they have mismanaged the CERB in giving the same amount to everyone and not taxing it. People who should be receiving the base amount of EI are making twice as much and those who should be receiving the max aren’t getting that much. And there are many who are getting it that shouldn’t be.” Concerns about CERB were not limited to Conservative respondents. Some worried about lack of accountability and that CERB serves as a disincentive to work.

However, negative assessments among non-Conservatives also emphasized gaps in existing benefit programs when it came to seniors and people with disabilities. For example, a Liberal respondent noted that the federal government has “made strides to support people that have been economically affected by COVID-19, though the benefits seem to be a little bit scattershot at times.” Expressing overall support for federal government responses, a respondent identifying with none of the main federal parties wished “they’d done more for the elderly and disabled. A one-time payment simply isn’t enough. Everything is becoming more and more expensive.” Much more critical, an NDP supporter wrote that “The government failed in supporting vulnerable people. The pandemic shows that the system is rigged in favour of the wealthy.”

Negative assessments among respondents identifying as Conservative reflect long-standing conflicts with Liberals, and in some cases, Trudeau himself. Conservative respondents, in particular, frequently emphasized the theme of government overreach. For example, respondents often expressed concern that the Liberal government used the existing state of emergency granting government temporary emergency powers as a means to encroach on civil liberties and further their own political aims. As one respondent declared, “they also seem to be circumventing our political system to do as they please with no opposition.”

Conservative respondents were also more likely to tie current social and cultural issues, such as gun rights, police funding, and Black Lives Matter, into their negative assessments. A few respondents specifically cited Trudeau’s appearance at an anti-racism demonstration on Parliament Hill coinciding with large-scale protests in cities in the United States in the wake of the police killing of George Floyd. As one respondent phrased it, “Over the top and double standards. People protest losing their jobs [and] gov[ernment] says they’re irresponsible but [at] BLM protest some even broke windows in Canada and our PM takes a knee in a crowd.” Another respondent specifically describing Trudeau’s appearance at the demonstration wrote that it “is a disgrace to all my brothers in blue.” Playing on the broader belief that the Liberals have used the crisis to “seize total control,” a respondent identifying with the far-right populist People’s Party in their assessment referred to “a totally unjust and nonsensical gun ban by order in council.”

When it comes to partisan preferences, our findings indicate that for the most part, Conservatives, who were by far the most critical of the federal Liberal government’s response to the pandemic, drew upon pre-existing political conflicts, but also on salient cultural and social cleavages, in justifying their criticism. Liberals and especially NDP supporters also expressed negative assessments, but these were more often framed in terms of socioeconomic inequalities in the pandemic response and critiques of benefits going to landlords and large corporations.
COVID-19 Experiences

Respondents’ perceptions of the federal government’s response were also shaped by their understandings of, and experiences with, COVID-19. Differences across these variables, however, were most apparent in considering how informed respondents felt about COVID-19, as shown in Table 2. A one-unit increase in how informed respondents were about COVID-19 was associated with a 4.0-percentage-point decrease in rating the government’s response negatively, a 12.1-percentage-point decrease in giving a neutral rating, and a 16.1-percentage-point increase in rating the government’s response positively.

Figure 3 shows that feeling informed about COVID-19 was also associated with attitudes about the federal government’s response in different ways. The proportion of respondents rating the government negatively decreased from 15.1 to 11.1 percent when moving from low to high levels of feeling informed. Differences were even more apparent when other categories were compared. For instance, 36.6 percent of people reporting low levels of information about COVID-19 rated the federal government’s response positively, compared with 52.6 percent of those with high levels of information. Thus, those who felt more informed about COVID-19 also thought that the government was doing a better job of addressing it.

Although reporting specific-COVID-19-related expense increases was not associated with views, reporting worsening financial situations was. Respondents who experienced financial hardship in the previous year were also more likely to rate the government’s response negatively by 3.8 percentage points and less likely to rate it positively by 7.6 percentage points (Table 2). These differences translated into 15.4 percent of respondents with worsening finances reporting negative views, 44.4 percent reporting neutral views, and 40.1 percent reporting positive views (Figure 3).

In addition, benefits receipt was positively associated with support for the federal government’s response. Respondents who applied for CERB were more likely to rate the government’s response positively by 8.1 percentage points and less likely to provide a negative rating by 5.4 percentage points than those who had not applied for CERB (Table 2). According to Figure 3, 50.1 percent of respondents who applied for CERB rated the government’s response as positive, 39.8 percent rated it as neutral, and 9.2 percent rated it as negative.

In their qualitative responses, individuals regularly discussed their perceptions of the federal government with reference to their own experiences, especially in receiving government supports, most notably CERB. One respondent expressed overall approval of government benefit programs while being unhappy about their own experience with receiving benefits: “The federal government did what was required in the immediate wake of the crisis, and despite the fact that I do not qualify for CERB, its rollout was quick and effective for most of Canada . . . yeah, I’m still grumpy about the CERB thing.” Indeed, those who rated the federal response positively also regularly referenced their experiences with benefit receipt as a justification, as in the case in this response: “the CERB program was excellent and made me able to cope throughout these tough times. I am very pleased [with] my government services.”

Others, who gave neutral ratings, also discussed their own and others’ experiences with CERB, pointing out issues they saw in its implementation. One respondent indicated that “CERB is good but it should be based on income and expenses, not just a general number everyone gets. Some people live rent-free while others (like me) have to use almost the whole benefit for living expenses, so I think it could be a little more equitable.” Respondents who held more negative perceptions of federal government responses linked these to their inability to make ends meet despite government benefits as a rationale. For example, one senior wrote that “when you have high drug expenses and rent to pay the money they’ve promised doesn’t go very far. And the money they promised which should have been paid out at the beginning of June has now been pushed back to sometime in July.” Others similarly noted insufficient support provided by benefits: “my husband’s income dropped by more than 25% and there was no help for him . . . and CERB paid me less than EI.”

The variation in perceptions about federal government responses suggests that individuals who are benefitting from CERB are likely having more of their needs met, feel more financially secure, and thus have more favourable attitudes about government. On the flip side, our findings suggest that these policy responses are not meeting the needs of all Canadians—especially people with disabilities and chronic health conditions who are not benefitting from CERB and are facing a host of different social, economic, and health-related challenges during the pandemic.

Discussion

This study examined relationships between respondents’ reported disabilities and chronic health conditions, partisanship, regionality, and experiences with COVID-19 and their views of the federal government’s response to COVID-19. We focused on an already disadvantaged group in Canadian society—people with disabilities and chronic health conditions. Despite these vulnerabilities, this group was largely ignored by policy-makers until about three months into the pandemic. Even so, when it comes to federal financial support, the vast majority of people with disabilities and chronic health conditions who are not benefitting from CERB continue to be excluded from aid programs. As we find, experiences with COVID-19 among these individuals mattered a great deal in shaping perceptions of government responses. However, our findings also point to broader factors, as
political preferences tended to be a stronger predictor of support for federal government responses to the crisis. Indeed, our findings show that respondents’ support for government responses was highly partisan. Our findings are corroborated by more recent public opinion polls, such as ones conducted in Alberta, where satisfaction with federal government responses showed significant splintering along party lines (Fletcher 2020).

Some of the largest differences were seen between respondents affiliated with the Liberal and Conservative parties, with Liberals voicing the most support and Conservatives voicing the least. As the qualitative responses demonstrate, part of this was driven by broader political views surrounding government spending, likely to be the case in the general population as well. Our findings reveal that while political elites by and large demonstrated consensus on how to respond to COVID-19, thus transcending party lines, the public displayed stronger views, a lot of which reflect traditional left–right divides over government spending and who is most “deserving” of government benefits. Although it is among those who believe governments have gone too far that we saw the most partisan responses, Liberal and NDP supporters also noted that too many vulnerable people were being excluded from government programs.

Future work should investigate these claims at the provincial level, linking partisan preferences with perceptions of provincial government responses, where many more governments are led by Conservatives. Our findings indicate more nuanced relationships between party affiliation and support for provincial government responses to the pandemic, where Conservatives in provinces with Conservative governments are still more critical of their governments than Liberals. Some of this may be attributable to concerns over spending even by Conservative-led governments as well as significant social distancing measures enacted by Conservatives in provinces such as Ontario.

We presented findings from one of the few national Canadian surveys that focuses on people with disabilities and chronic health conditions. Due to many of the larger limitations regarding survey research today, including underrepresentation of marginalized communities, quota sampling is extremely useful in studying the immediate effects of health crises on people with disabilities and chronic health conditions. Although quota sampling is not truly representative of a random sample of the population, our sample does mirror the demographic characteristics of members of the target population of interest, which in this case is Canadians with disabilities and chronic health conditions, as discussed in online Appendix B. However, this online survey likely missed many people without access to computers or the Internet. Results still provide us with considerable understanding of individuals’ experiences and views regarding government responses to COVID-19, giving voice to a group that is often overlooked in politics and policy-making.

Conclusion

Policy preferences among people with disabilities and chronic health conditions reflect broader partisan divides, as well as health and economic situations specific to this group. Our article alludes to how this plays out in relation to support for federal government responses to the COVID-19 crisis. Although respondents mentioned feeling left out and overlooked—as one respondent put it—perceptions of government responses were less directly driven by respondents’ status as people with disabilities or as having chronic health conditions and more by partisan divisions and broader social, economic, and cultural cleavages (Harell 2020). However, disability and health status may have indirect effects on attitudes to government via personal experiences with COVID-19, which include financial concerns, barriers in accessing health and social services, and worries about what the so-called “new normal” will look like for them.

Our article speaks to current considerations, but it also alludes to long-term implications both for health and financial wellbeing and for perceptions of government policy and policy-makers. The pandemic is ever-evolving. What many respondents have voiced is that effective policy pandemic countermeasures should include targeted efforts to help disadvantaged groups, in addition to broader efforts to address social conditions shaping experiences during and post-crisis. Policy-makers have long recognized that the needs of persons with disabilities are often overlooked during disasters and emergencies and ensuing recovery efforts. Canada and others have affirmed their commitment to take disability-related needs into account in all disaster-related policies and practices through international agreements including the United Nations Convention on the Rights of Persons with Disabilities and Sendai Framework for Disaster Risk Reduction 2015–2030. In this regard, policy experts are calling for permanent income supports targeting disability and health groups (Prince 2020), paralleling similar calls to institutionalize CERB into a universal basic income for all (Snell 2020; Willms and Montgomery 2020). Whatever the case, when it comes to recovery, exclusion should not be the “new normal.”

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Notes
1 As of 22 June 2020, there were 101,019 confirmed COVID-19 cases in Canada and 8,410 deaths with both cases and deaths trending downward across the country (World Health Organization 2021).
2 Washington Group on Disability Statistics (2021); see also Pettinicchio and Maroto (2021) on measuring disability.
3 We tested other combinations of categories, as well as a series of logit and linear models, and found similar relationships across variables. Results are available in online Appendix C.
4 Ordered logistic regression models present another alternative for analyzing ordered categorical data. However, these models assume that the relationship between each pair of outcomes is the same (proportional odds assumption), and initial model tests showed that our data violated this assumption. We therefore chose the more flexible multinomial logistic regression model for our analyses. Ordinal logistic regression results are available in online Appendix C.
5 Demographic controls include age, gender, race, parental and marital status, and education. We also controlled for employment status and homeownership.
6 Descriptive statistics for these variables appear in Appendix A.
7 The “Other or No Party” category includes respondents who listed parties with smaller membership, such as the Green Party, the People’s Party, and the Bloc Québécois, as well as respondents who indicated “Other party” or no preference.
8 We grouped smaller provinces together due to sample size limitations.
9 During a moment of silence at the demonstration, Trudeau, wearing a mask, was seen bowing his head and dropping to one knee in an expression of solidarity with the protest movement.

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Appendix A: Survey Data Information and Descriptive Overview

The 2020 COVID-19 Response Survey of People with Disabilities and Health Conditions is a quota-based online survey administered from 11 to 22 June 2020 with the help of Qualtrics (Qualtrics 2021), an Internet-based survey company, to obtain a sample of people with disabilities and health conditions across provinces. Qualtrics recruits participants from a range of online research panels with which the company partners. These panels consist of pools of people who have been recruited to take regular surveys for academic and corporate researchers. Panelists provide detailed and updated personal information to panel maintainers, including demographic information. Qualtrics, as a panel aggregator, matches respondents to surveys based on their profiles and randomly selects them to take surveys that they are likely to qualify for, based on a given survey’s eligibility criteria.

In the case of our online survey, we provided Qualtrics with eligibility criteria based on age, region, and health and disability status, which it used to recruit participants from appropriate online panels to our survey. Qualtrics takes steps to ensure that a respondent does not take the same survey multiple times or self-select into particular surveys based on the survey topic and incentives. Our survey instrument also included additional screening questions and attention checks to mitigate potential data quality issues. We included location-based sampling quotas to ensure that the proportion of respondents from each province within our final sample matched the proportion of the Canadian population located in each province.

Online samples of the type used in this survey are common in the social sciences and are frequently used as an alternative to much costlier traditional survey and sampling methods, such as those based on telephone interviews and random digit dialing.

We began with 1,392 respondents. Twenty-nine cases were initially dropped due to poor quality (including gibberish) in their qualitative responses. An additional 51 cases were removed because respondents did not complete the survey. In order to ensure that respondents were reading and answering the survey questions carefully, we included two quality control screening questions that required respondents to provide a specific answer. Those who did not answer both quality control questions correctly were screened out of the survey. A final 285 cases were removed because respondents either did not meet the inclusion criteria or failed quality control and attention checks. This resulted in our final sample of 1,027 respondents with no missing data across variables.

The median survey response time was 20 minutes and the mean was 29 minutes. Survey response times ranged from 6 minutes to 15 hours. Longer response times likely reflected instances where respondents began the survey, left it open on their devices, and then went back to complete it later on. Ninety-five percent of respondents completed the survey in under 1 hour and 80 percent of respondents completed the survey in less than 30 minutes.

Descriptive Information

Table A.1 presents descriptive statistics for our survey sample. The mean age for respondents in our sample was 49 years, which is older than the mean age of 41 years for the population in 2016 (Statistics Canada 2020a). This was expected, however, because disabilities and chronic health conditions tend to be more prevalent among the older population (Canadian Chronic Disease Surveillance System 2019; Morris et al. 2018).

The gender make-up of our sample was 53 percent female, 46 percent male, and 1 percent nonbinary or other. According to the 2017 CSD, disabilities are more prevalent among women; 56 percent of people with disabilities were female (Morris et al. 2018, 8). Ninety percent of respondents self-identified as heterosexual, 3.5 percent identified as homosexual (gay or lesbian), 5.0 percent as bisexual, and 1.3 percent reported other identities, such as asexual, transgender, and two-spirit. Data on sexual orientation are limited, but across several U.S. and Canadian studies 1–2.3 percent of the population identified as gay or lesbian, 0.7–2.9 percent as bisexual, and 0.6 percent as transgender (Waite and Denier 2019). A greater proportion of respondents identified as a sexual minority in our data than estimated for the larger population. However, additional research shows that rates of disability tend to be higher among lesbian, gay, and bisexual adults (Fredriksen-Goldsen, Kim, and Barkan 2012).

In terms of education, 22.8 percent of respondents had a high school diploma or less education; 11.1 percent had some postsecondary education but no diploma; 31.1 percent completed an apprenticeship, trades, or college certificate; 24.7 percent had a bachelor’s degree; and 10.3 percent obtained a degree beyond a bachelor’s, such as a doctorate, master’s, or professional degree. Respondents obtained somewhat more education than the population across Canada. Among adults aged 25–64 in Canada, 35.3 percent had a high school diploma or less (this includes people with some postsecondary education but no degree); 36.3 percent had an apprenticeship, trades, college certificate, or university certificate below a bachelor’s degree; and 28.5 percent obtained a bachelor’s degree or higher in 2016 (Statistics Canada 2020b).

Approximately 35.2 percent of respondents were employed full-time and another 12.6 percent were employed part-time, 4.4 percent were unemployed, and 47.9 percent were not in the labour force, which included homemakers, students, retired persons, and people unable to work due to COVID-19. In this sample, 8.8 percent of respondents reported that they were unable to work due to COVID-19. According to the 2017 CSD, the employment rate among people with disabilities was 59.4 percent (Morris et al. 2018).
### Table A.1: Descriptive Overview of Data (N = 1,027 Adults)

| Variable                                      | Sample Frequency | Proportion or Mean | 95% CI          |
|------------------------------------------------|------------------|--------------------|-----------------|
| Age (mean, y)                                  | 48.999           | 48.999             | (47.923–50.075) |
| Gender                                         |                  |                    |                 |
| Male                                           | 472              | 0.460              | (0.429–0.490)   |
| Female                                         | 544              | 0.530              | (0.499–0.560)   |
| Non-binary or other                            | 11               | 0.011              | (0.004–0.017)   |
| Sexual identity                                |                  |                    |                 |
| Heterosexual                                   | 927              | 0.903              | (0.884–0.921)   |
| Homosexual                                     | 36               | 0.035              | (0.024–0.046)   |
| Bisexual                                       | 51               | 0.050              | (0.036–0.063)   |
| Other                                          | 13               | 0.013              | (0.006–0.020)   |
| Member of a racialized minority group          | 184              | 0.179              | (0.156–0.203)   |
| Immigrant                                      | 148              | 0.144              | (0.123–0.166)   |
| Indigenous                                     | 24               | 0.023              | (0.014–0.033)   |
| First language other than English or French    | 50               | 0.049              | (0.036–0.062)   |
| Employment status (reduced variable)           |                  |                    |                 |
| Employed                                       | 490              | 0.477              | (0.447–0.508)   |
| Unemployed                                      | 45               | 0.044              | (0.031–0.056)   |
| NILF (homemaker, retired, in school)           | 402              | 0.391              | (0.362–0.421)   |
| Unable to work due to COVID-19                 | 90               | 0.088              | (0.070–0.105)   |
| Education                                      |                  |                    |                 |
| HS or less                                      | 234              | 0.228              | (0.202–0.254)   |
| Some PSE, no degree                            | 114              | 0.111              | (0.092–0.130)   |
| Apprenticeship, trades, or college certificate | 319              | 0.311              | (0.282–0.339)   |
| Bachelor’s degree                              | 254              | 0.247              | (0.221–0.274)   |
| Advanced degree                                | 106              | 0.103              | (0.085–0.122)   |
| Marital status                                 |                  |                    |                 |
| Never married                                  | 324              | 0.315              | (0.287–0.344)   |
| Cohabitin                                      | 138              | 0.134              | (0.114–0.155)   |
| Married                                        | 406              | 0.395              | (0.365–0.425)   |
| Formerly married                               | 159              | 0.155              | (0.133–0.177)   |
| Any children                                   | 246              | 0.240              | (0.213–0.266)   |
| No. of adults in household                     |                  |                    |                 |
| 1 (self)                                       | 329              | 0.320              | (0.292–0.349)   |
| 2                                              | 484              | 0.471              | (0.441–0.502)   |
| 3                                              | 124              | 0.121              | (0.101–0.141)   |
| 4                                              | 65               | 0.063              | (0.048–0.078)   |
| ≥ 5                                            | 25               | 0.024              | (0.015–0.034)   |
| Province (reduced)                              |                  |                    |                 |
| Ontario                                        | 399              | 0.389              | (0.359–0.418)   |
| Quebec                                         | 230              | 0.224              | (0.198–0.249)   |
| British Columbia                               | 134              | 0.130              | (0.110–0.151)   |
| Prairie Provinces                              | 199              | 0.194              | (0.170–0.218)   |
| Atlantic Provinces                             | 65               | 0.063              | (0.048–0.078)   |

Notes: Estimates refer to sample data. Estimates provided as proportions unless otherwise specified.
Source: 2020 COVID-19 Response Survey of People with Disabilities and Health Conditions.
which indicates a lower employment rate in our sample (47.8%). However, percentages are much closer when respondents unable to work due to COVID-19 are considered.

Racialized groups are likely underrepresented in this sample. The percentage who identify as Indigenous within our sample (2.3%) was approximately half that in the larger population (4.9%) in 2016 (Statistics Canada 2020a). The percentage who identify as nonwhite in our sample (17.8%) was also lower than the percentage of people who identify as visible minorities in Canada (22.3%). Immigrants and noncitizens were also underrepresented in this sample, with 14.4 percent of respondents indicating that they immigrated to Canada, compared with 21.9 percent of the population, and 5.5 percent of respondents indicating that they were not Canadian citizens, compared with 7.0 percent of the population. However, again, it is not clear whether these groups are over- or underrepresented within groups of people with disabilities and CHCs.

When sample respondents are compared with individuals aged 15 and older in Canada, the sample closely mirrored the population in terms of marital status and household size. Within the sample, 53.0 percent of respondents were married or cohabiting, 31.5 percent were never married, and 15.5 percent were formerly married. Across Canada in 2016, 57.4 percent of individuals age 15 and older were married or in common law relationships, 28.2 percent were never married, and 14.2 percent were formerly married (Statistics Canada 2020a).

Finally, data were collected via quota-based sampling to ensure that we obtained a representative sample across provinces. We obtained a sample with 38 percent of responses from Ontario, 23 percent from Quebec, 13 percent from British Columbia, 18 percent from the Prairie Provinces (Alberta, Manitoba, Saskatchewan), and 7 percent from the Atlantic Provinces (Newfoundland and Labrador, New Brunswick, Nova Scotia, and Prince Edward Island), based on 2016 Census population estimates.

**Disability and Chronic Health Conditions**

Table A.2 provides further information regarding the prevalence of different disabilities and chronic health conditions among sample participants. Overall, 10.6 percent of respondents reported a single disability or condition, 35.0 percent reported 2-3 disabilities or conditions, 32.4 percent reported 4-5 disabilities or conditions, and 22.0 percent reported six or more disabilities or conditions.

Disability-related questions allowed respondents to indicate the severity of their disability by reporting whether they sometimes, often, or always experienced any vision, hearing, physical, cognitive, emotional, or other difficulties. Table A.2 includes rates of any disability for whether the respondent indicated sometimes, often, or always and rates of more severe disabilities for whether the respondent indicated often or always. In both cases, emotional or other disabilities were the most commonly reported.

Regarding chronic health conditions, diabetes, asthma, hypertension, and obesity were the most common chronic health conditions reported by participants. Fewer participants (< 6%) reported conditions such as cancer, kidney disease, respiratory disease, heart disease, and being immunocompromised.
### Table A.2: Descriptive Statistics for Disability and Chronic Health Condition Variables (N = 1,027 Adults)

| Variable                                  | Sample Frequency | Estimate | 95% CI     |
|-------------------------------------------|------------------|----------|------------|
| No. of disabilities or chronic health conditions |                   |          |            |
| 1                                         | 109              | 0.106    | (0.087–0.125) |
| 2–3                                       | 359              | 0.350    | (0.320–0.379) |
| 4–5                                       | 333              | 0.324    | (0.296–0.353) |
| ≥ 6                                       | 226              | 0.220    | (0.195–0.245) |
| Disability type (any)                     |                   |          |            |
| Vision                                    | 558              | 0.543    | (0.513–0.574) |
| Hearing                                   | 270              | 0.263    | (0.236–0.290) |
| Physical                                  | 433              | 0.422    | (0.391–0.452) |
| Cognitive                                 | 502              | 0.489    | (0.458–0.519) |
| Emotional                                 | 565              | 0.550    | (0.520–0.581) |
| Other                                     | 591              | 0.575    | (0.545–0.606) |
| Disability type (always or often)         |                   |          |            |
| Vision                                    | 120              | 0.117    | (0.097–0.136) |
| Hearing                                   | 54               | 0.053    | (0.039–0.066) |
| Physical                                  | 131              | 0.128    | (0.107–0.148) |
| Cognitive                                 | 128              | 0.125    | (0.104–0.145) |
| Emotional                                 | 269              | 0.262    | (0.235–0.289) |
| Other                                     | 426              | 0.415    | (0.385–0.445) |
| Chronic health condition                  |                   |          |            |
| Asthma                                    | 249              | 0.242    | (0.216–0.269) |
| Cancer                                    | 42               | 0.041    | (0.029–0.053) |
| Chronic kidney disease                    | 16               | 0.016    | (0.008–0.023) |
| Chronic respiratory or lung disease       | 54               | 0.053    | (0.039–0.066) |
| Diabetes                                  | 262              | 0.255    | (0.228–0.282) |
| Hypertension                              | 221              | 0.215    | (0.190–0.240) |
| Obesity                                   | 163              | 0.159    | (0.136–0.181) |
| Immunocompromised                         | 51               | 0.050    | (0.036–0.063) |
| Heart disease                             | 56               | 0.055    | (0.041–0.068) |

Notes: Estimates refer to sample data. Estimates provided as proportions unless otherwise specified.

Source: 2020 COVID-19 Response Survey of People with Disabilities and Health Conditions.