

# COVID Shutdown Regulations Negatively Impact Employment and Sales of Restaurants in Ontario

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## Abstract

Due to the world-wide COVID-19 pandemic, shutdown restrictions on businesses and facilities have limited economic activities into a recession. This paper examines the shutdown effect on restaurants by reopening a city in Ontario (Peterborough) and comparing its restaurant operating situation with that of another city (Brantford) after three months reopening. The survey result indicates that shutdown restrictions have negative impacts on restaurant employment, sales and operating confidence. However, the higher increased COVID cases in the reopened city suggests the Ontario government to mindfully plan for further policy decisions.

## 1 Introduction

The COVID-19 pandemic has impacted many businesses, including restaurants, and resulted in mass-layoffs of workers throughout the world. According to HuffPost (Tencer 2020), “Canada’s unemployment rate was 13.5% in May 2020, the highest it has been since 1976” (Wikipedia, n.d.). However, the unemployment crisis in Canada, which would result in rising rates of depression, suicide, frustration, crime, and other unprecedented social issues, was proactively considered and managed by the Government of Canada. The Canada Emergency Wage Subsidy (CEWS) (Canada, n.d.b) as well as the Canada Emergency Rent Subsidy (CERS) (Canada, n.d.a) programs were enacted swiftly and served as much needed lifelines for businesses to survive. The Ontario government also provided a range of support such as provincial tax rebates, loans and debt relief interventions, utility bill payment reductions, business grants, and low-interest loans, etc(Ontario, n.d.).

To help recover from the current recession, we at Petit Poll have partnered with the Ontario government to examine the effects and scope of COVID shutdown on restaurants. We conducted an experiment by selecting two single tier cities, namely Peterborough and Brantford,<sup>1</sup> with similar restaurant operating situations in Ontario and investigated how reopening the dine-in services for restaurants in Peterborough has prevailed over the state of continued shutdown in Brantford through surveys. The results showed that continuing shutdown has negatively impact the employment, sales volume and operating confidence on restaurant businesses in Brantford. In addition, the governmental support programs contributed substantially to restaurant businesses in both reopened and shutdown cities. However, the higher increased COVID cases in Peterborough demonstrates the drawback of the reopening, and the Ontario government should hold a clear measure between public health and economic recovery before further policy implementations.

We organize the rest of paper as follows: In Data section, we first discuss interventions of the experiment. Next, we introduce sampling methods and survey methodologies to collect the data. And then, we discuss main findings from survey results. In Discussion section, we would elaborate on concerns about the intervention on city selections, sampling methods and survey methodologies. And we also propose our thoughts on further policy implications. In Appendix, we include screenshots of survey contents.<sup>2</sup>

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<sup>1</sup>Ontario’s Municipal Act, 2001 defines a single-tier municipality as “a municipality, other than an upper-tier municipality, that does not form part of an upper-tier municipality for municipal purposes”

<sup>2</sup>Code and data are available at the GitHub repo: [https://github.com/honn-ishinn/restaurants\\_covid\\_shutdown](https://github.com/honn-ishinn/restaurants_covid_shutdown)

## 2 Data

Our data explores shutdown effects on restaurant businesses in Ontario. We analyzed it using R (R Core Team 2020), and packages `tidyverse` (Wickham et al. 2019), `stringr` (Wickham 2019), `here` (Müller 2020), `ggpubr` (Kassambara 2020), `janitor` (Firke 2021). We used R packages `cansim` (Shkolnik 2020), `httr` (Wickham 2020), `xml2` (Wickham, Hester, and Ooms 2020) to decide our intervention and sampling method, and packages `bookdown` (Xie 2016), `kableExtra` (Zhu 2020), `ggrepel` (Slowikowski 2021) to format the document. We referenced *Impact Evaluation in Practice* (Gertler et al. 2016) and *Sampling Theory and Practice* (Wu and Thompson 2020) to design our experiment.

### 2.1 Intervention

Partnered with the Ontario government, we want to examine the shutdown effects on restaurant businesses in Ontario. The plan of the experimental design was to reopen all restaurants (i.e. enable the dine-in option) in particular Ontario regions, while enforcing current provincewide shutdown restrictions (i.e. disable the dine-in option) on restaurants in the rest of Ontario regions. And after the three-month reopening, we compare restaurant operating situations in reopened regions with those in shutdown regions through data collected from online surveys of restaurant owners.

However, due to current COVID pandemic, any loosening of shutdown restrictions increases chances of COVID exposures, resulting in challenges on public health and healthcare of reopened regions. It is highly risky and hasty to reopen a large area of Ontario regions for the sole purpose of our experiment. Therefore, we mindfully chose Peterborough, a relative small size Single-tier city 125 kilometers northeast of Toronto, as the only region to reopen in Ontario and then compared its restaurant operating situations with those in Brantford, another Single-tier city 105 kilometers southwest of Toronto with similar population. Since demographics, land areas and more importantly, restaurant operating situations between these two cities are quite similar with each other<sup>3</sup>, we consider these two cities as valid comparison cities that could yield an accurate estimate of restaurant businesses shutdowns. In our experiment, we assigned restaurants in Peterborough as the treatment group and those in Brantford as the control group. We also ensured restaurants within these two cities to have equal opportunities receiving government support (e.g. subsidies, grants, etc.) to estimate the true impact of shutdown effects on restaurant businesses after three-month reopening in Peterborough.

Starting from October, 2020, the Ontario government reopened Peterborough while keeping shutdown restrictions on the rest of Ontario regions. After a three month period in January 2021, we at Petit Poll started to conduct survey on restaurants in Peterborough and Bratford about their business performance from October to December. Survey results are released in February 2021.

### 2.2 Sampling Method and Survey Methodology

A presurvey with five questions was conducted before the decision on intervention was made. The purpose was to make sure our assumptions about the restaurant similarities between Peterborough and Brantford are based on concert evidence. We asked selected respondents about the restaurants' location, employment, sales, service types, average price per meal per person to assess whether the restaurants in the two cities are of considerable similarities.

**We considered all Ontario restaurants as its target population. The frame population was decided by randomly selecting 100 restaurants from Brantford and 100 from Peterborough. To ensure the external validity of the experiment, we used the following steps to find these restaurants:**

1. Scrape the postal codes of all restaurants located within the circle of the Brantford City Centre to a 40 km radius on Yelp. And then use the same method for Peterborough.
2. Acquire a list of postal codes in Brantford CMA and Peterborough CMA from the Postal Code Conversion File (PCCF) retrieved from the University of Toronto Library (Toronto Library, n.d.).

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<sup>3</sup>Approach to examine the similarities of these two cities are further introduced in the discussion section

3. Compare the two lists and eliminate the restaurants with postal codes outside of Peterborough CMA and the Brantford CMA.
4. Randomly select 100 restaurants from Brantford and 100 restaurants from Peterborough to form the frame population.

Table 1: Sampling Results Summary

City	Survey Administered	Total Sample Collected	Telephone Survey	Online Survey
Brantford	100	50	43	7
Peterborough	100	55	47	8

We used telephone interviews and online questionnaire methods to administer the survey. The telephone interview served as the primary channel and an online survey option was provided when respondents could not or prefer not to be interviewed over the phone. As shown in the above table (Table 1), our sampled population included 50 valid responses in Brantford and 55 collected from Peterborough, among which, 7 were collected via the online survey in Brantford and 8 were collected via the online survey in Peterborough. Surveys that were not answered or have incomplete answers were treated as nonresponses and were not included in the dataset for further analysis. The surveys were administered in the following steps:

1. The phone number of the restaurants was scraped from Yelp while we determined the frame population.
2. Working from 2 pm to 4 pm, half of the survey staff called the Brantford restaurants, and the other half called the Peterborough restaurants simultaneously to avoid sampling bias. Each phone call took around 15 minutes to complete. All restaurants on the pre-determined list were reached within one week.
3. When the call was connected, the survey staff would provide a brief introduction of the survey purpose and indicate that the survey was sponsored by the Ontario government. See Appendix A for details.
4. To ensure the quality and accuracy of the data collection, the survey staff would ask if the respondent at the restaurant worked at a management-level position in the restaurant or was familiar with the restaurant’s sales performance. If the respondent answered no, the survey staff would ask the caller to pass the call to the relevant staff in the restaurant. If that staff was not available, the survey staff will schedule another call or provide the online questionnaire based on the preference identified by the respondent. Respondents who were interested in answering the questions via online questionnaires could leave their email addresses and have two weeks to complete the survey questions.
5. Respondents who were not reached by phone for the first time were called again in the following week. Restaurants that did not respond to the second call were documented as “nonresponse”.
6. To address privacy concerns and to increase the response rate, the respondents were notified before the survey that all answers were recorded anonymously. The respondents were told at the beginning of the telephone survey that they could terminate the survey anytime if they want to. The respondents were also notified before the survey that they would have a chance to win a 10-dollar gift card if they fully participated.

As shown in the chart below, the results for the presurvey confirmed our initial assumptions that the restaurants in Peterborough and Brantford are similar enough for further study. Therefore, we implemented our intervention of reopening the restaurants in Peterborough.

Three months after the implementation of our intervention, we conducted our formal survey using the same sampling frame and sampling methods. Please see the sampling details and the response rate in the table (Table 1) below, our sampled population included 45 valid responses in Brantford and 48 collected from Peterborough, among which, 5 were collected via the online survey in Brantford and 7 were collected via the online survey in Peterborough.

The two surveys incurred a total cost of \$10,000 CAD, which was mainly used to hire and train staff to conduct the telephone survey, collect data and administer the online survey if applicable. A small portion

Table 2: Sampling Results Summary

City	Survey Administered	Total Sample Collected	Telephone Survey	Online Survey
Brantford	100	45	40	5
Peterborough	100	48	41	7

of the cost (\$500 CAD) was used for online survey technology support and database maintenance. We also gave out 50 gift cards with a total worth (\$500 CAD) as incentives for higher response rate.

## 2.3 Main Survey Results

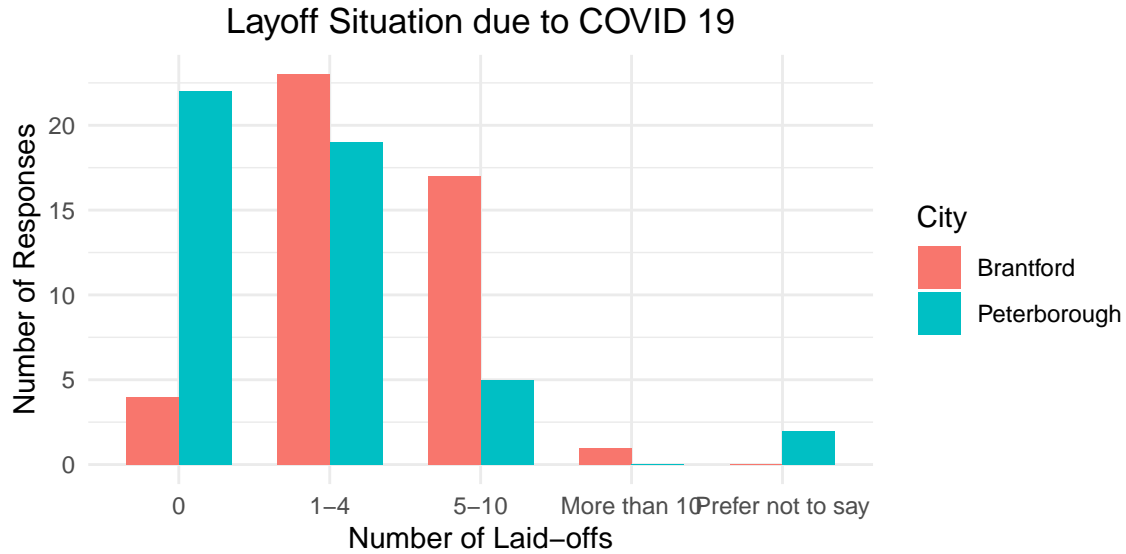


Figure 1: Layoff Situation due to COVID 19

The above figure (Figure 1) shows that restaurants in Peterborough had lower rates of layoff compared to restaurants in Brantford, suggesting families in Peterborough to have experienced better financial situations and probably less stress.

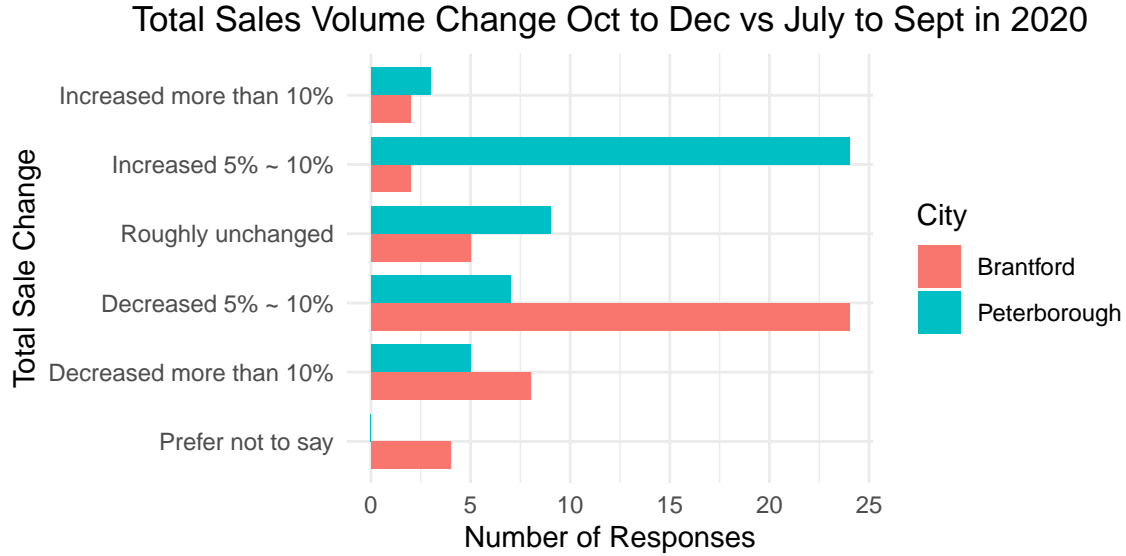


Figure 2: Total Sales Volume Change Oct to Dec vs July to Sept in 2020

From Figure 2, we notice a considerable increase in sales in Peterborough during the reopen period. This indicated that if restaurants were open, people would have used their dine-in services, regardless of potential pandemic risks. Besides, this result also corresponds with lower layoffs in Peterborough since restaurants need staff for their dine-in areas to operate.

In contrast, continuing shutdown restrictions during October to December on Brantford resulted in a slight decrease in sales volume for those restaurants. We propose possible reasons for the decrease in restaurant sales: (1) Residents in Brantford changed their meal behaviors to cook more by themselves, instead of relying on meals from restaurants. (2) The continuing shutdown resulted in closures of other businesses, so these business staffs were not contributing for the restaurant sales anymore.

The increased costs of restaurants in Peterborough, as shown in Figure 3, demonstrated more activities in their restaurants. This change admits that the restaurants probably should have preserved more of their staff and consumed more utility or housekeeping materials to maintain their dine-in area. Although increased operating cost would usually impact the business unit negatively, from a broader view, these costs generate economic flow into local society and are vital for other business sectors to survive. So we consider the increased cost in restaurants during the reopening period as a good signal of economic wellbeing.

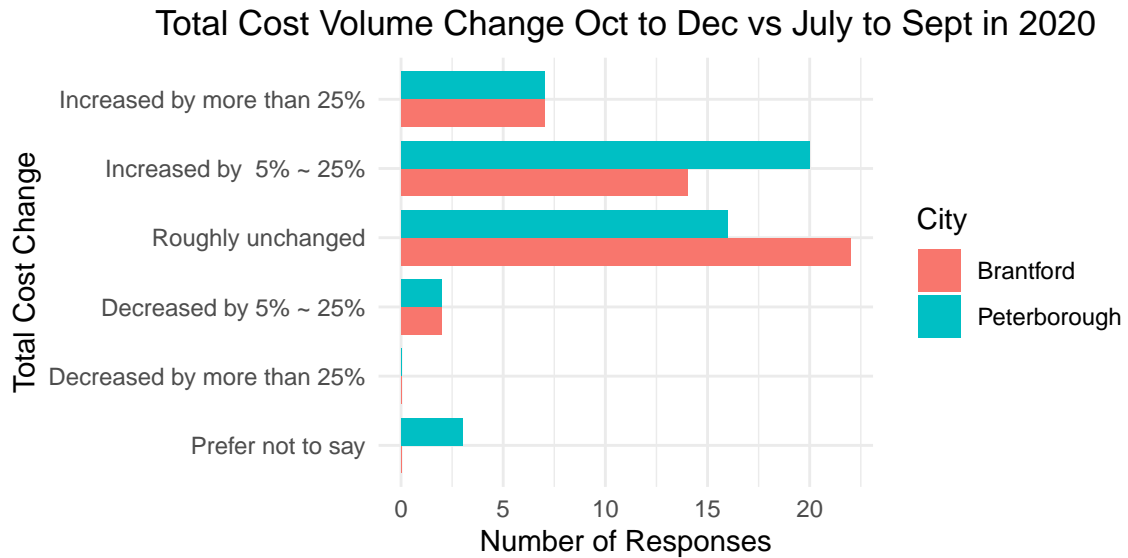


Figure 3: Total Cost Volume Change Oct to Dec vs July to Sept in 2020

The following figure (4) demonstrates restaurant owners' opinions towards the expected survivability of their businesses. It is very unfortunate that restaurants in Brantford are not as positive to continue their businesses for longer times, indicating a stressful operating situation during these continuing shutdown period. While on the other hand, restaurants in Peterborough generally expect to survive longer, showing stronger confidence to continue their businesses after reopening.

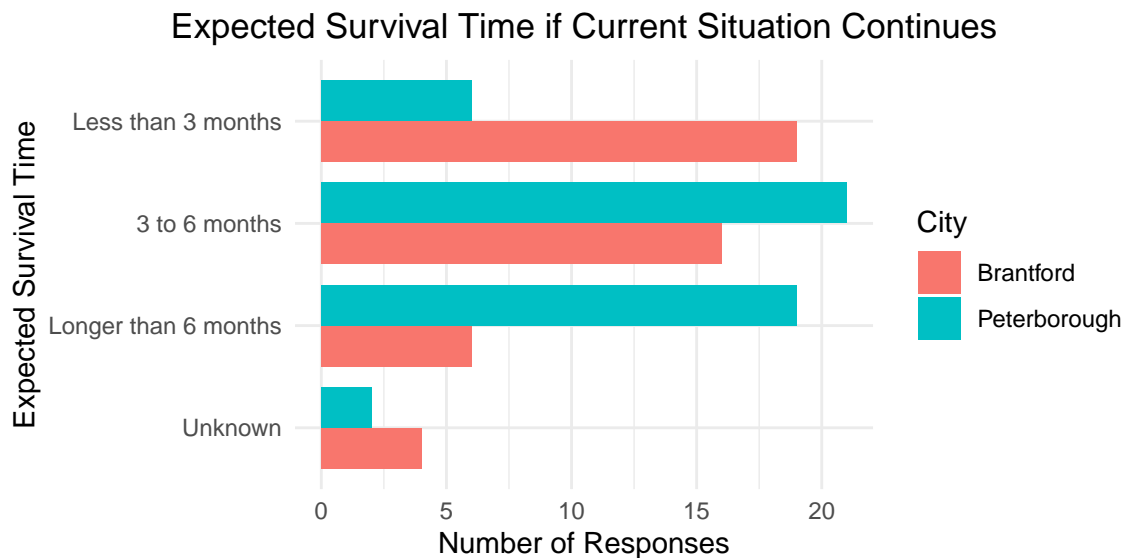


Figure 4: Expected Survival Time if Current Situation Continues

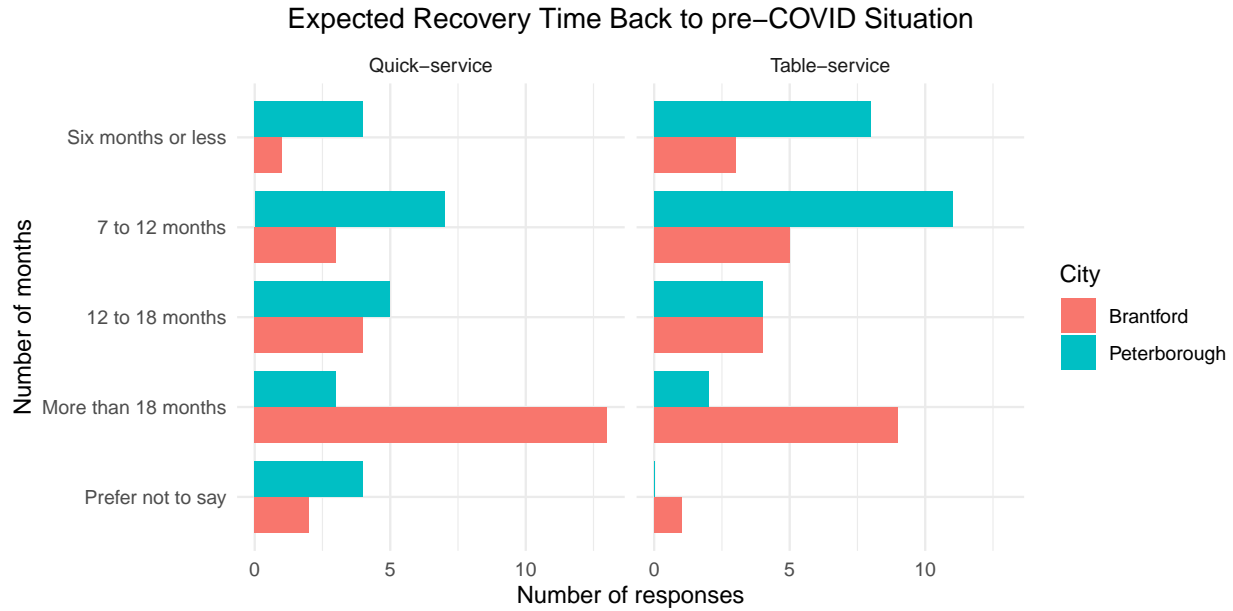


Figure 5: Expected Recovery Time Back to pre-COVID Situation

Although from Figure 4, we saw a pervasive gloom among the Brantford restaurants, Figure 5 illustrates that even if the pandemic ends immediately, many restaurants in Brantford, especially quick-service restaurants, have indicated that it is difficult to return to the state of operation before the COVID-19 outbreak. While for Peterborough, although some of them suspect the recovery will take more than a year to recoup with the previous situation, most of them indicated this period would be less than a year.

In addition, survey results about expected recovery time back to pre-COVID situation (Figure 5) illustrate that even if the pandemic ends immediately, most restaurants in Brantford, especially quick-service restaurants, hold negative views to recover back to pre-COVID operating situation in a short period of time. For restaurants in Peterborough, despite some suspicions to recoup with the pre-COVID situation in more than a year, most of them expected to recover in less than a year. Therefore, we believe that the continuing shutdown in Brantford has harmed expectations of future operation possibilities in Brantford, while the reopening in Peterborough has built confidence to resolve current operation difficulties.

```
simulated_dataset %>%
  tabyl(q1_city, q11_rate_support)%>%
  adorn_totals("row")%>%
  adorn_totals("col")%>%
  adorn_percentages("row")%>%
  adorn_pct_formatting(digits=2)%>%
  adorn_ns()%>%
  adorn_title("combined", row_name = "City", col_name = "Rating")%>%
  kable("html", align = 'cccccc', caption = 'Number or percentage of each rating level')%>%
  kable_styling(full_width = F)
```

Number or percentage of each rating level

City/Rating

- 1
- 2
- 3

4

5

Total

Brantford

2.22% (1)

6.67% (3)

8.89% (4)

42.22% (19)

40.00% (18)

100.00% (45)

Peterborough

6.25% (3)

14.58% (7)

27.08% (13)

35.42% (17)

16.67% (8)

100.00% (48)

Total

4.30% (4)

10.75% (10)

18.28% (17)

38.71% (36)

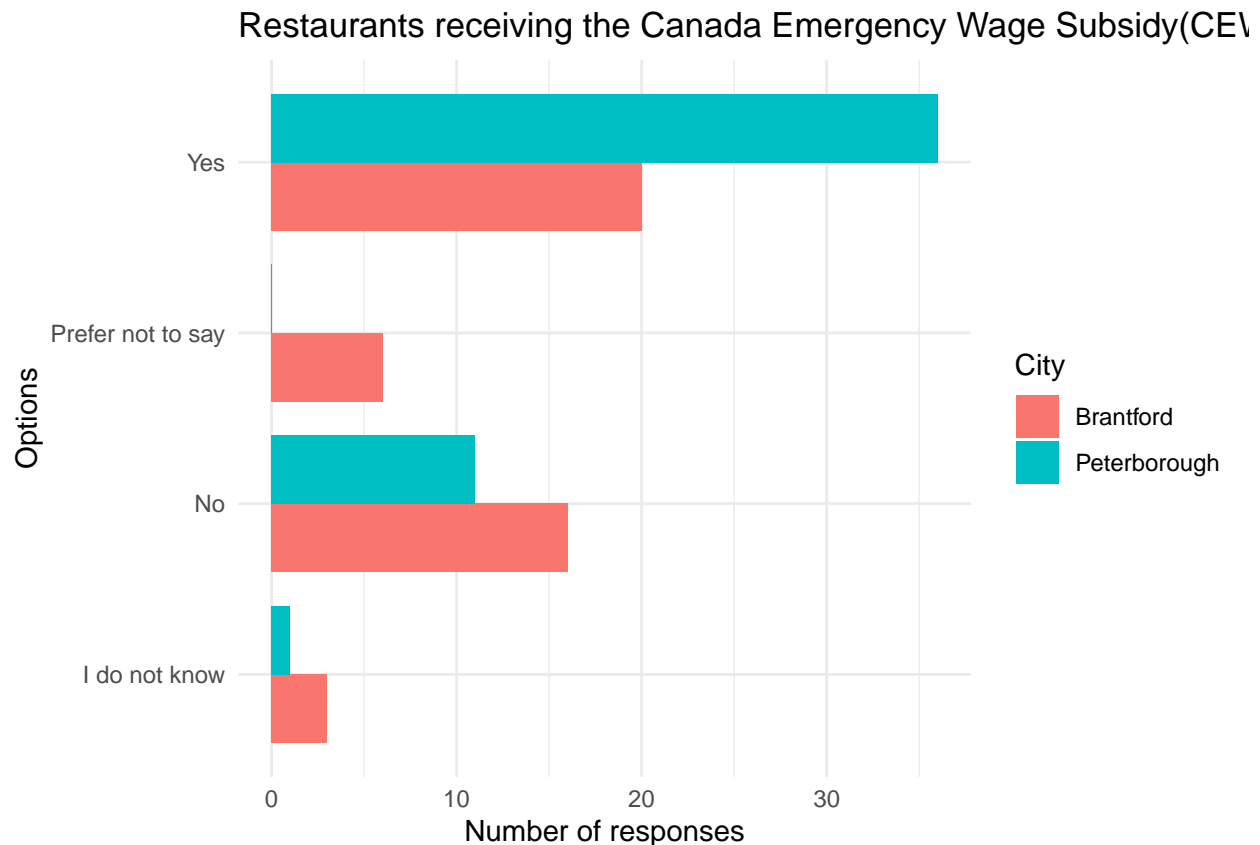
27.96% (26)

100.00% (93)

As an agent to gather relevant feedback to the Ontario Government, we asked restaurants how they found the governmental support programs so far. According to Table, both cities stated the effectiveness of the governmental support programs, nevertheless, this figure also implies to their satisfaction and also appreciation for these programs by business entities in both cities.

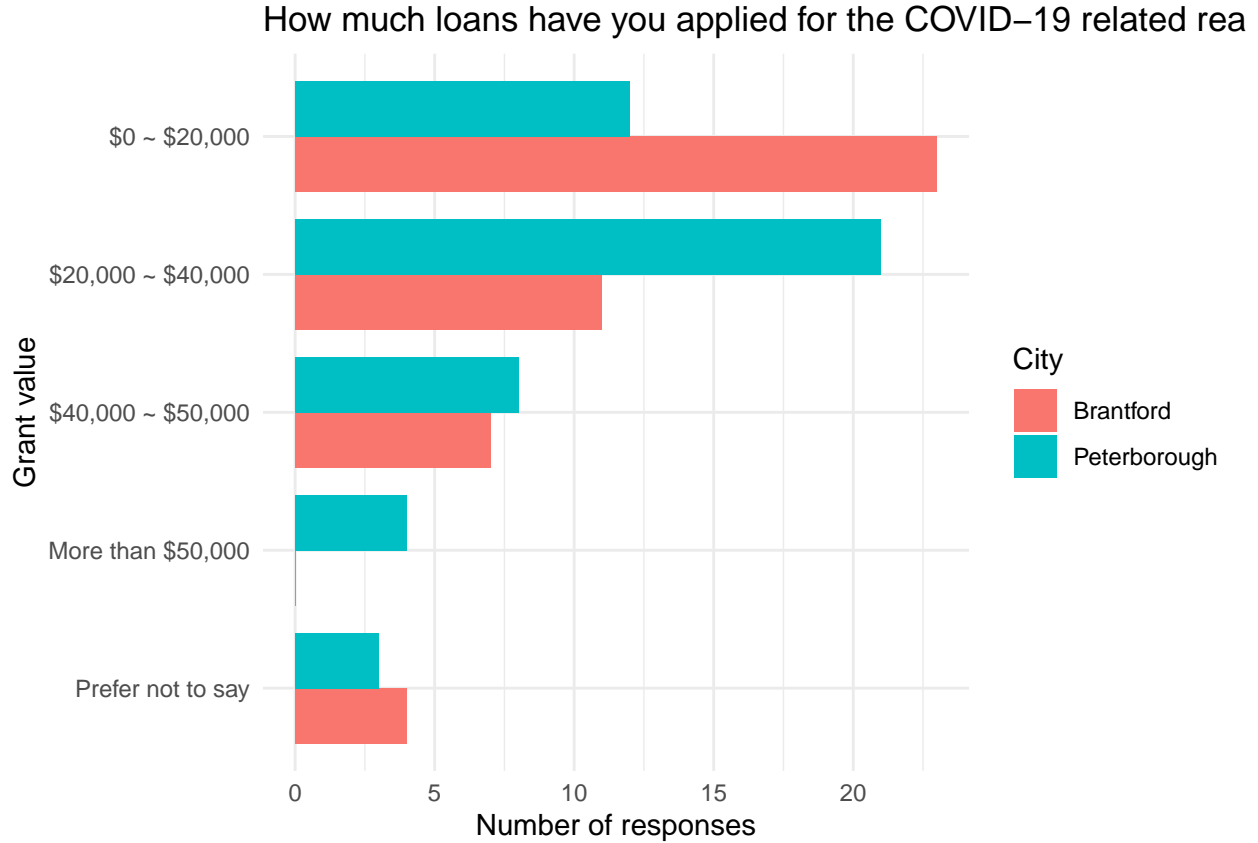
```
# use
data.frame(table(simulated_dataset$q13_CEWS,simulated_dataset$q1_city))%>%
# mutate(Var1 = fct_relevel(Var1 , "Prefer not to say", "More than $50,000", "$40,000 ~ $50,000", "$20,000
ggplot(aes(Var1, Freq,fill=Var2)) +
  geom_bar(stat = "identity", width = 0.8, position = position_dodge())+
  ylab("Number of responses")+
  xlab("Options")+
  ggtitle("Restaurants receiving the Canada Emergency Wage Subsidy(CEWS)")+
  guides(fill=guide_legend(title="City"))+
  theme_minimal()+
  theme(axis.text.x = element_text(angle = 0))+
  coord_flip()
```





According to figure 14, Peterborough restaurants are using more Canadian Emergency Wage Subsidy (CEWS)- a governmental program available for businesses to reimburse a considerable portion of their employees' salaries – compared to Brantford restaurants. It is reasonable for Brantford restaurants to have utilized less of this grant because CEWS covers the wages partially and yet, the employer should pay the rest of the employee's salary. This is also consistent with the results in figure 3 where they indicated to have had more layoffs.

```
data.frame(table(simulated_dataset$q14_loans,simulated_dataset$q1_city))%>%
  mutate(Var1 = fct_relevel(Var1 ,"Prefer not to say","More than $50,000","$40,000 ~ $50,000","$20,000 ~ $40,000"))
ggplot(aes(Var1, Freq,fill=Var2)) +
  geom_bar(stat = "identity", width = 0.8, position = position_dodge())+
  ylab("Number of responses")+
  xlab("Grant value")+
  ggtitle("How much loans have you applied for the COVID-19 related reasons?")+
  guides(fill=guide_legend(title="City"))+
  theme_minimal()+
  theme(axis.text.x = element_text(angle = 0))+
  coord_flip()
```



As shown in figure 15, Peterborough restaurants have received more business loans than restaurants in Brantford. Since loans have to be paid back, businesses operating at low operating expectation are less likely to apply for the loans. And this corresponds with our previous findings of the expected survival time (Figure 4) and expected recovery time (Figure 5) as mentioned before.

They probably see a brighter future for their business to think out their repayments accordingly. However, Brantford restaurants which according to figure 8 are less hopeful to their business in future, probably mutter “It is never too late to mend” and refrain adding to their liabilities, though the loan’s interest be very low.

### 3 Discussion

#### 3.1 Determine the Treatment Group and Control Group

To obtain an accurate estimate of the shutdown effect on restaurant businesses, average characteristics of restaurants in the reopening city and those in the shutdown city need to be identical in the absence of the reopen intervention under current COVID outbreak. Since businesses in the food service industry are highly labor intensive (Swayne 2016), the **total employment** on food service between selected cities is preferred to be equal as the identical characteristic. Besides, **population density** ( **Total Population/ Total Land Area in squared kilometers**) also has significant organizational life-cycle effects(Parsa et al. 2011). At different population density levels, competitions for food services varies, leading to different restaurants mortality rates even without the reopen intervention. As a result, total employment on food service and population density serve as primary restaurant operation characteristics for the selection of treatment city and control city.

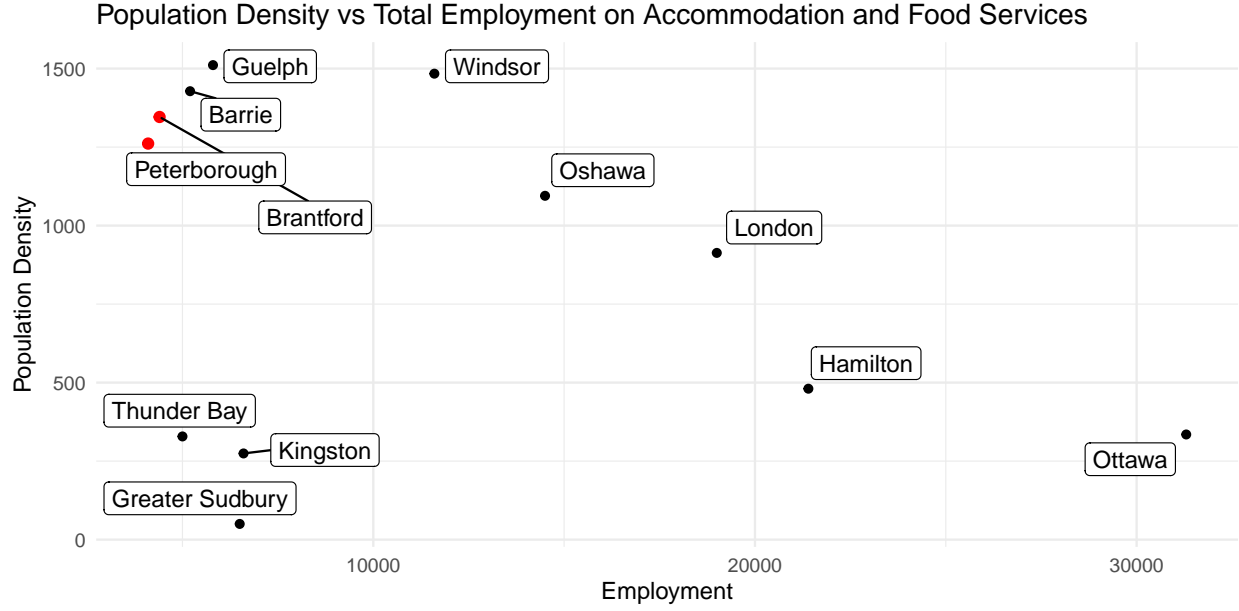


Figure 6: Population Density vs Employment on Accommodation and Food Services in Ontario Cities in 2016

We used the employment by industry data and 2016 Census data available at Statistics Canada to identify cities with similar total employment on food service and population density. The above point graph (Figure 6) indicates that Brantford and Peterborough have similar characteristics affecting the restaurant operations. In addition, the coefficient of the graph

$$\frac{\text{Population Density}}{\text{Total Employment}} = \frac{\text{Total Population/Total Land Area}}{\text{Total Employment}}$$

, which could be interpreted as the number of people served by a restaurant employee per square kilometers, helps to identify the restaurant operating situation in designated regions. Similar coefficients between Brantford and Peterborough (0.306 vs 0.308) also suggest close restaurant characteristics. Besides, there is neither significant demographics nor land areas difference between these two cities, so we consider these two cities as a valid comparison group and reopened Peterborough as the treatment group while maintaining Brantford shutdown as the control group.

Extra concerns when determining the treatment group and control group:

- The employment data at Statistics Canada uses the NAICS (North American Industry Classification System) standard and assigns employment services to Accommodation and Food Service category. So there is less employment in food services. We took the convention that the ratio between the accommodation employment and the food service employment between Peterborough and Brantford is the same.
- Since the distance between Brantford and Peterborough is more than 200 kilometers apart, residents in Brantford are unlikely to travel such long distance solely for a dine-in meal. So the treatment of reopening Peterborough would not affect the mealing behavior in Brantford. However, residents in shutdown regions near Peterborough might go for dine-in meals, potentially increasing sales in Peterborough restaurants. The actual shutdown effect on restaurants could be overestimated due to possible increase in sales from nearby shutdown regions' residents.
- The mindful comparison between cities' similarities on employment, population density, etc. ensures the internal validity of our experiment so that we could accurately estimate the true impact of shutdown restrictions on restaurant. However, our shutdown effect evaluation may not be generalized to the

entire population of interest, i.e. all restaurants in Ontario such as township regions or cosmopolitan city Toronto due to different levels of competitions, operating costs, etc.

### 3.2 Concerns about Sampling Method

The sampling methods of this experiment were accompanied by some inevitable limitations and biases:

- The list of restaurants in Brantford and Peterborough may not be accurately represented on Yelp. Some restaurants may not be registered on Yelp and some may not have updated their information on time. What is more, restaurants would only appear in the Yelp query when it has been reviewed by one of its users, which suggests that certain new restaurants may not be on the list. These limitations may result in the exclusion bias of our sample.
- Since the results of the presurvey suggest apparent similarities between the restaurants in Peterborough and those in Brantford, we assume the surveyed restaurants to have similar **qualities**. However, the attributes of the restaurants (size, employments, service type, etc) were not controlled in our analysis. In other words, we believe the response rate within the different restaurant subgroups to be the same. Variations in the actual response between restaurants in two cities are unknown and may impact the internal validity of the results.
- **The sample suffered from survivorship bias as we only surveyed restaurants that are still in operations. Restaurants that lost their businesses during the pandemic could not be captured with the current method. However, these may be the ones that are most severely impacted. Another aspect of the survivorship bias involves the use of the same sampling frame for the presurvey and the formal survey. Since there is a three-month time lag, some restaurants may be closed during that time.**
- The sampling methods bore self-selection bias. From a psychological standpoint, respondents may have a stronger desire to respond to the survey if they have a strong opinion to express about their situations. The results showed that restaurant owners in Brantford faced a steeper sales decrease, and we expect that this may contribute to the higher survey response rate in Brantford.
- The accuracy of the responses may be hindered by the difficulties in reaching the management staff of restaurants. The phone numbers scraped from Yelp was usually used for food ordering and the staff who picked up the phone may not know the sales status. However, we do not believe this would significantly skew the result. According to Statistics Canada, 98.5% of restaurants in Canada have 0-99 employees(Canada, n.d.c). Since food service businesses are usually small to medium size, there is a high likelihood for the survey to reach management staff in the restaurant. Respondents were also asked to pass the phone to management staff or leave their email to receive the online survey if they would like to do so, therefore mitigating the negative impact caused by the telephone survey method.
- Respondents may react differently in a phone interview compared to an online survey. The two methods may have the potential to produce significantly different results even when the two surveys have the same questions (Yan Xin 2014). People may be more comfortable answering a certain type of question online rather than by phone call, or vice versa.

### 3.3 Survey Results and Policy Implication

- Staffing implications
- Policy implications: The Government of Ontario should continue the existing supports provided to restaurants during the lockdown and consider additional support measures to mitigate the risk of increased unemployment. Reopening the restaurants may lead to increased employment in the corresponding area.
- Restaurant sales implementation
- The Government should expect better sales for reopened restaurants. However, it is important to acknowledge that economy would take a long time to reach pre-pandemic performance. Continued support to restaurants may still be needed.

- Future projects of restaurants
- Rebuilding business confidence is a crucial aspect of short-term business recovery and long-term economic stability. The Government should carefully monitor business projection and equip businesses with tailored supports based on their recovery needs.
- Striking a balance between COVID-19 cases

```
# readin the covid tracking data
covid_tracking <- readr::read_csv(here::here("inputs/data/simulated_covid_data.csv"))

## Warning: Missing column names filled in: 'X1' [1]

##
## -- Column specification -----
## cols(
##   X1 = col_double(),
##   track_date = col_date(format = ""),
##   covid_cases_p = col_double(),
##   covid_cases_b = col_double()
## )
```

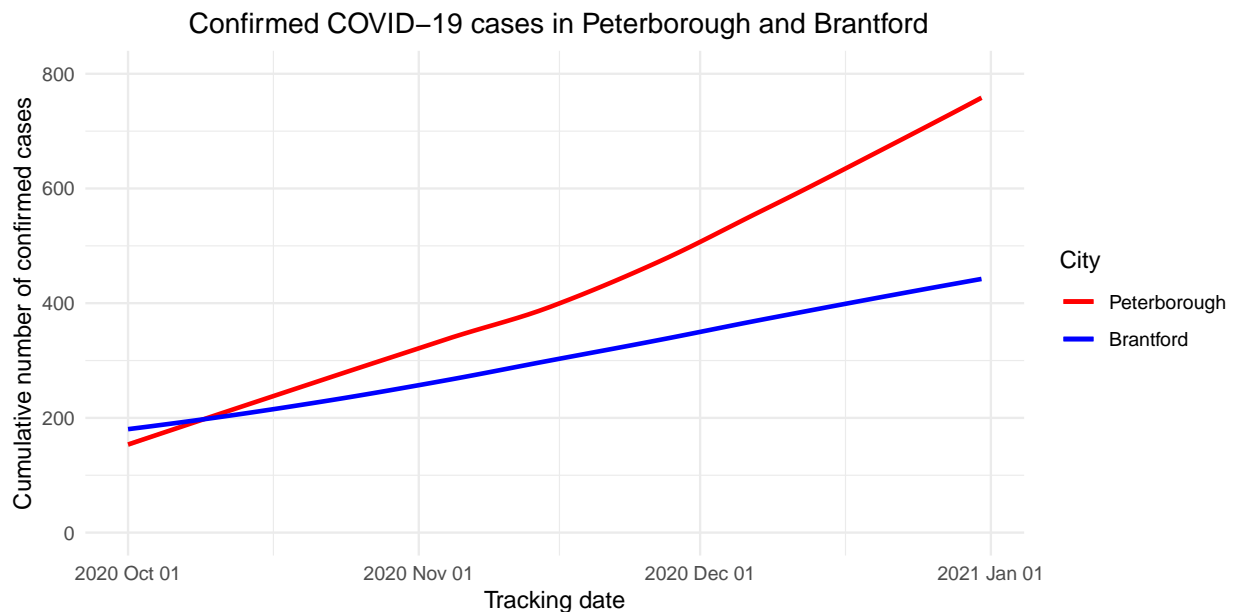


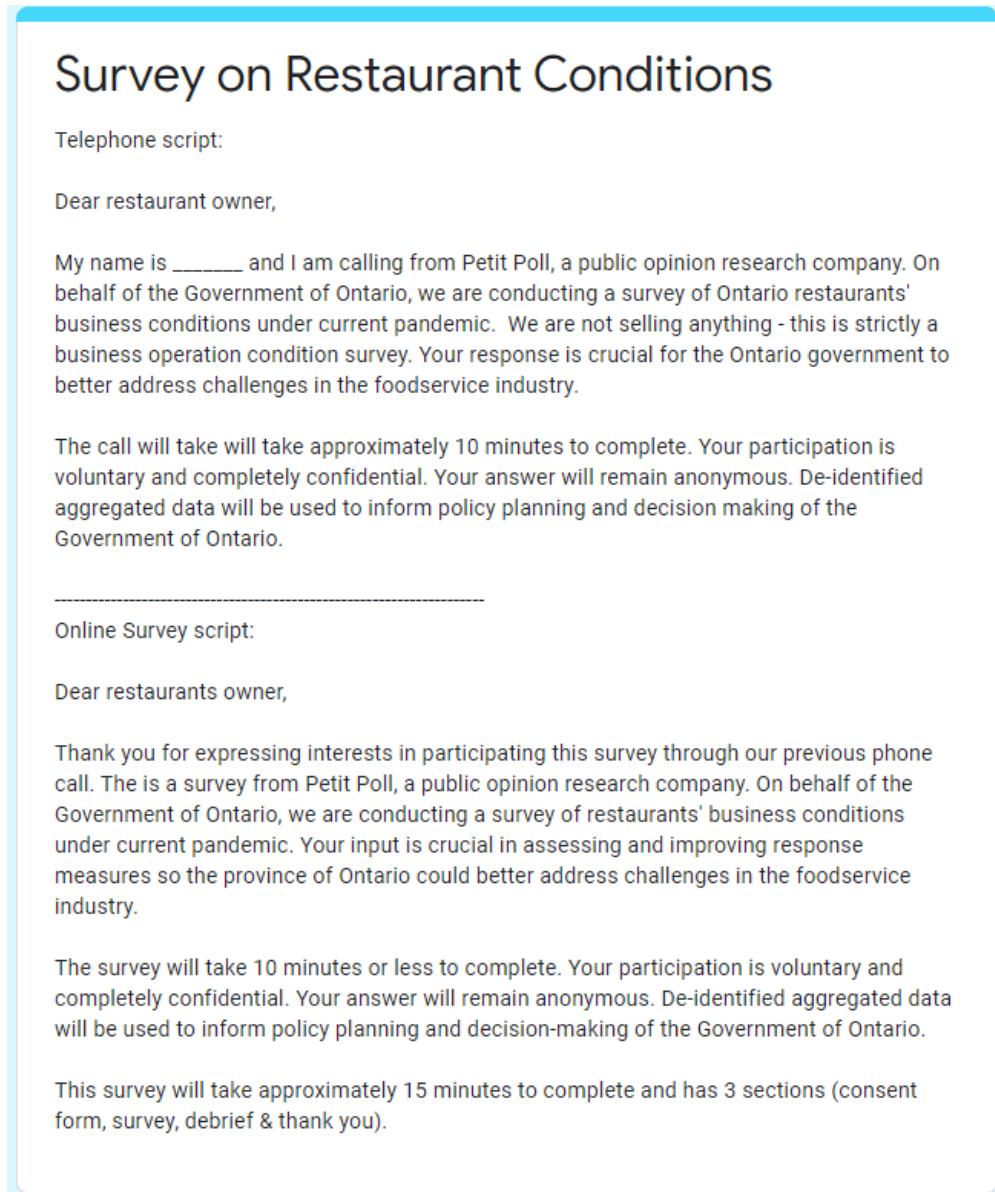
Figure 7: Total Confirmed COVID-19 cases in Peterborough and Brantford

- While reopening leads to increased employment, improved restaurant sales, positive business confidence, and ultimately increased government revenue, the impact of the reopening of restaurants needs to be assessed against the situation of the pandemic. By closely monitoring the development of confirmed COVID-19 cases during the intervention period, we found a more rapid spread of COVID-19 cases in Peterborough compared to Brantford (Figure). Although more quantitative and qualitative research needs to be conducted to determine if the surge is related to the reopening intervention, the results serve as an alarming-clock for policymakers and the public.
- The government should strike a balance between economic recovery and public health and safety. The health and safety of Ontarians should always be the top priority for the government. The Government should carefully monitor and assess the impact of COVID-19 cases and adjust its reopening policies accordingly.
- In the case of reopening and possible reclosing of restaurants in a region, the government should

clearly and effectively communicate the risks and harms of COVID-19 resurgence and its willingness and devotion to addressing business concerns.

## 4 Appendix A

Link to access the first survey about restaurant business conditions conducted in September, 2020: <https://docs.google.com/forms/d/1Bl8CbJiN8sUbhsDdnzqP4iflyE9KT8iJgYI9ldcR2g8>

The image shows a screenshot of a survey script titled "Survey on Restaurant Conditions". The script is divided into two sections: "Telephone script" and "Online Survey script". The "Telephone script" section includes a greeting, an introduction of the researcher (Petit Poll) and the purpose of the survey (to assess restaurant business conditions under the current pandemic), and a statement about the confidentiality and voluntary nature of the participation. The "Online Survey script" section includes a greeting, a thank you for the previous phone call, a reminder of the survey's purpose, and a statement about the confidentiality and voluntary nature of the participation. The script is presented in a light blue box with a white background.

**Survey on Restaurant Conditions**

Telephone script:

Dear restaurant owner,

My name is \_\_\_\_\_ and I am calling from Petit Poll, a public opinion research company. On behalf of the Government of Ontario, we are conducting a survey of Ontario restaurants' business conditions under current pandemic. We are not selling anything - this is strictly a business operation condition survey. Your response is crucial for the Ontario government to better address challenges in the foodservice industry.

The call will take approximately 10 minutes to complete. Your participation is voluntary and completely confidential. Your answer will remain anonymous. De-identified aggregated data will be used to inform policy planning and decision making of the Government of Ontario.

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Online Survey script:

Dear restaurants owner,

Thank you for expressing interests in participating this survey through our previous phone call. The is a survey from Petit Poll, a public opinion research company. On behalf of the Government of Ontario, we are conducting a survey of restaurants' business conditions under current pandemic. Your input is crucial in assessing and improving response measures so the province of Ontario could better address challenges in the foodservice industry.

The survey will take 10 minutes or less to complete. Your participation is voluntary and completely confidential. Your answer will remain anonymous. De-identified aggregated data will be used to inform policy planning and decision-making of the Government of Ontario.

This survey will take approximately 15 minutes to complete and has 3 sections (consent form, survey, debrief & thank you).

Figure 8: Scripts to contact with restaurant owners in the first survey

## Survey on Restaurant Conditions

Telephone script:

Dear restaurant owner,

My name is \_\_\_\_\_ and I am calling from Petit Poll, a public opinion research company. On behalf of the Government of Ontario, we are conducting a survey of Ontario restaurants' business conditions under current pandemic. We are not selling anything - this is strictly a business operation condition survey. Your response is crucial for the Ontario government to better address challenges in the foodservice industry.

The call will take approximately 10 minutes to complete. Your participation is voluntary and completely confidential. Your answer will remain anonymous. De-identified aggregated data will be used to inform policy planning and decision making of the Government of Ontario.

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Online Survey script:

Dear restaurants owner,

Thank you for expressing interests in participating this survey through our previous phone call. This is a survey from Petit Poll, a public opinion research company. On behalf of the Government of Ontario, we are conducting a survey of restaurants' business conditions under current pandemic. Your input is crucial in assessing and improving response measures so the province of Ontario could better address challenges in the foodservice industry.

The survey will take 10 minutes or less to complete. Your participation is voluntary and completely confidential. Your answer will remain anonymous. De-identified aggregated data will be used to inform policy planning and decision-making of the Government of Ontario.

This survey will take approximately 15 minutes to complete and has 3 sections (consent form, survey, debrief & thank you).

Figure 9: Consent form of the first survey



**Business conditions**

1. Where is your restaurant located?

- ☐ Peterborough
- ☐ Brantford

2. How many employees do your restaurant currently have? (Restaurant means the entity in your current location, a chain restaurant could have any entities)

- ☐ Less than 5
- ☐ 5 - 10
- ☐ 10 - 30
- ☐ 30 - 50
- ☐ Prefer not to say

3. Which of the following category best describe your restaurant in terms of formality?

- ☐ Fine Dining
- ☐ Casual Dining

4. On average, how much sales has your restaurant made monthly in the past three months?

- ☐ \$0 - \$25,000
- ☐ \$25,000 - \$50,000
- ☐ \$50,000 - \$80,000
- ☐ \$80,000 - \$110,000
- ☐ \$110,000 - \$150,000
- ☐ \$150,000 or above
- ☐ Prefer not to say

5. Which best describes the nature of your restaurant?

- ☐ Table-service restaurant
- ☐ Quick-service restaurant

6. How many customers could your restaurant serve at the same time? (You may skip this question if your restaurant is in quick-service)

- ☐ Less than 10
- ☐ 10 - 20
- ☐ 20 - 40
- ☐ 40 - 70
- ☐ 70 - 100
- ☐ More than 100
- ☐ Prefer not to say

Figure 10: Survey questions in the first survey

**Thank you!**

Thank you for taking the time to participate in our survey!

Your insights are incredibly valuable as we aim to better understand the businesses conditions of Ontario restaurants under current COVID pandemic.

We want to restate our commitment to your confidentiality. All of the responses from our survey will be kept confidential. Although we may use aggregated data in our presentations, we will not use your name, your restaurants' name or any other identifying information anywhere in our data. Additionally, all data will be deleted after 60 days.

If you have any questions, please contact researchers at [info@petitpoll.ca](mailto:info@petitpoll.ca).

Figure 11: Thanks section of the first survey

## 5 Appendix B

Link to access the second survey about impact of COVID-19 on restaurants conducted in January, 2021:  
[https://docs.google.com/forms/d/1FXSeKFkvCtM41k9xFYjQQ\\_eDGdBs9skVYZ3zU5LNRgY](https://docs.google.com/forms/d/1FXSeKFkvCtM41k9xFYjQQ_eDGdBs9skVYZ3zU5LNRgY)

## Survey about the Impact of COVID-19 on Restaurants

Telephone survey script:

Dear restaurant owner,

My name is \_\_\_\_\_ and I am calling from Petit Poll, a public opinion research company. On behalf of the Government of Ontario, we are conducting a survey of Ontario restaurants' business impact during the current pandemic. We are not selling anything - this is strictly a business operation condition survey. Your response is crucial for the Ontario government to better address challenges in the foodservice industry.

This call will take approximately 15 minutes to complete. Your participation is voluntary and completely confidential. Your answer will remain anonymous. De-identified aggregated data will be used to inform policy planning and decision making of the Government of Ontario.

---

Online survey script:

Dear restaurants owner,

Thank you for expressing interests in participating this survey through our previous phone call. This is a survey from Petit Poll, a public opinion research company. On behalf of the Government of Ontario, we are conducting a survey of restaurants' business impact during the current pandemic. Your input is crucial in assessing and improving response measures so the province of Ontario could better address challenges in the foodservice industry.

The survey will take approximately 15 minutes to complete and has 3 sections (consent form, survey, debrief & thank you). Your participation is voluntary and completely confidential. Your answer will remain anonymous. De-identified aggregated data will be used to inform policy planning and decision making of the Government of Ontario.

Figure 12: Scripts to contact with restaurant owners in the second survey

## Consent Form

The procedure to be used is an online survey consisting of 15 close-ended multiple-choice questions. No personal or identifying information will be collected. At the end of the survey, you will be thanked for your time and provided with a contact e-mail for future reference.

### RIGHT TO WITHDRAW

I am free to withdraw at any time before, during, or after the study without being penalized and without the need to give any explanation.

### DATA PRIVACY, AND CONFIDENTIALITY

All materials and results will be kept confidential, and, in particular, my name and any identifying information will not be associated with the data. My responses will be recorded through the online form to assist with the research process. This data will be deleted after 60 days.

### ETHICS

This activity constitutes reflective and professional practice and is exempt from Research Ethics Board (REB) Review per <https://petitpoll.ca/ethics-human-research/activities-exempt-human-ethics-review>

### INFORMED CONSENT

I hereby consent to participate in a survey conducted by Petit Poll on behalf of the Government of Ontario.

If you have any questions or concerns about this study, please contact Petit Poll at [info@petitpoll.ca](mailto:info@petitpoll.ca).

The purpose of this study is to understand Ontario restaurants' business impact during the current pandemic.

I understand that:

- The procedures to be used is answering an online survey
- I will receive no compensation for my participation
- I may pause, skip an activity, or withdraw from the study at any time without penalty and without the need of an explanation
- My responses will be recorded through the online form and shared with the Government of Ontario to inform policy planning and decision making.
- All materials and results will be kept confidential, and, in particular, that my name, my restaurant's name and any identifying or identified information will not be associated with the data.

Figure 13: Consent form of the second survey

**Background Information**

1. Where is your restaurant located?

☐ Peterborough

☐ Brantford

2. Which best describes the nature of your restaurant?

☐ Table-service restaurant

☐ Quick-service restaurant

**Business conditions**

3. How many employees have you laid off because of COVID 19?

☐ 0

☐ 1-4

☐ 5-10

☐ More than 10

☐ Prefer not to say

4. How was your total sales volume during October to December 2020 compared to July to September 2020?

☐ Increased more than 10%

☐ Increased 5% ~ 10%

☐ Roughly unchanged

☐ Decreased 5% ~ 10%

☐ Decreased more than 10%

☐ Prefer not to say

Figure 14: Survey questions 1 - 4 in the second survey

<p>5. How was your total costs volume during October to December 2020 compared to July to September 2020?</p> <p><input type="radio"/> Decreased more than 25%</p> <p><input type="radio"/> Decreased by 5% – 25%</p> <p><input type="radio"/> Roughly unchanged</p> <p><input type="radio"/> Increased by 5% – 25%</p> <p><input type="radio"/> Increased by more than 25%</p> <p><input type="radio"/> Prefer not to say</p>	<p>7. To what extent, your revenue changed after the pandemic?</p> <p><input type="radio"/> Decreased more than 25%</p> <p><input type="radio"/> Decreased by 5% – 25%</p> <p><input type="radio"/> Roughly unchanged</p> <p><input type="radio"/> Increased by 5% – 25%</p> <p><input type="radio"/> Increased by more than 25%</p> <p><input type="radio"/> Prefer not to say</p>
<p>6. To what extent, the number of your orders have decreased after the pandemic?</p> <p><input type="radio"/> Decreased more than 25%</p> <p><input type="radio"/> Decreased by 5% – 25%</p> <p><input type="radio"/> Roughly unchanged</p> <p><input type="radio"/> Increased by 5% – 25%</p> <p><input type="radio"/> Increased more than 25%</p> <p><input type="radio"/> Prefer not to say</p>	<p>8. If current conditions continue, how long do you expect your business to survive before you will have to close down permanently?</p> <p><input type="radio"/> Less than 3 months</p> <p><input type="radio"/> 3 to 6 months</p> <p><input type="radio"/> Longer than 6 months</p> <p><input type="radio"/> Unknown</p> <p><input type="radio"/> Prefer not to say</p>

Figure 15: Survey questions 5 - 8 in the second survey

<p>9. Which best describes the current profitability of your overall operations?</p> <p><input type="radio"/> Operating at a loss</p> <p><input type="radio"/> Breaking even</p> <p><input type="radio"/> Profit between 1% and 5%</p> <p><input type="radio"/> Profit of 5% or more</p> <p><input type="radio"/> Prefer not to say</p>	<p><b>Government intervention</b></p> <p>Please answer the following questions based on your experience in the past three months (October to December)</p>
<p>10. If COVID-19 situation stops now, how many months do you expect your business to recover to the previous level?</p> <p><input type="radio"/> Six months or less</p> <p><input type="radio"/> 7 to 12 months</p> <p><input type="radio"/> 12 to 18 months</p> <p><input type="radio"/> More than 18 months</p> <p><input type="radio"/> Prefer not to say</p>	<p>11. To what extent do you feel the government financial support programs to help your business survive? (1 being bad, 5 being excellent.)</p> <p><input type="radio"/> 1</p> <p><input type="radio"/> 2</p> <p><input type="radio"/> 3</p> <p><input type="radio"/> 4</p> <p><input type="radio"/> 5</p> <p><input type="radio"/> Prefer not to say</p>
	<p>12. Have signed up for the lease subsidy introduced by the government last year?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input type="radio"/> I don't know</p> <p><input type="radio"/> Prefer not to say</p>

Figure 16: Survey questions 9 - 12 in the second survey

13. Is your business receiving the Canada Emergency Wage Subsidy(CEWS)?

- ☐ Yes
- ☐ No
- ☐ I don't know
- ☐ Prefer not to say

14. How much loans have you received for COVID-19 related reasons?

- ☐ \$0 - \$20,000
- ☐ \$20,000 – \$40,000
- ☐ \$40,000 – \$50,000
- ☐ More than \$50,000
- ☐ Prefer not to say

15. Including the above governmental programs (if applicable), how much grants have you received for the COVID related reasons?

- ☐ \$0 - \$10,000
- ☐ \$10,000 - \$20,000
- ☐ \$20,000 - \$40,000
- ☐ More than \$40,000
- ☐ Prefer not to say

Figure 17: Survey questions 13 - 15 in the second survey

**Thank you!**

Thank you for taking the time to participate in our survey!

Your insights are incredibly valuable as we aim to better understand how are the businesses of the Ontario restaurants impacted by the current pandemic.

We want to restate our commitment to your confidentiality. All of the responses from our questionnaire will be kept confidential. Although we may use aggregated data in our presentations, we will not use your name, your restaurants' name or any other identifying information anywhere in our data. Additionally, all data will be deleted after 60 days.

If you have any questions, please contact researchers at [info@petitpoll.ca](mailto:info@petitpoll.ca).

Figure 18: Thanks section of the second survey

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