# Liberal Party Should Pay Attention on Crime Problem to Attract Their Voters in Next Coming Election

STA304 - Fall 2020

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### **Executive Summary:**

Petit Poll's October polling update aims to help the Ontario Liberal party to figure out what kind of problem in Ontario do people care about the most. We developed a survey on Google Form and simulated it in relation to the real-word circumstances, this means we are simulating based on the previous facts for example the percentage of voting in each party. We found that Crime is the most challenging problem for people in Ontario. This is important because the simulation result can be a reference for the Liberal party to know what promise they make during the election will favour people in Ontario the most. However, one weakness is that our report is not based on the real respondent but only an assumption, so the actual result may vary from our result. In this case, the liberal party can take this survey as a template to release a survey on social media to gain some true respondent.

#### Introduction

The 43rd Ontario General Election will be held on or before June 2, 2022. From 2003-2014, the Liberal party was elected as premier in Ontario for more than 10 years (TVO, 2018). During the 2018 Ontario election, the Ontario Progressive Conservative Party, led by Doug Ford, won the majority government with 76 out of 124 seats, while the Ontario Liberal Party, led by Kathleen Wynne, recording the worst results in the party's 161-year history, which dropped from 55 seats to only 7 seats (Dentons, 2018). After changing the leader of the Ontario Liberal Party, it is important for the Liberal Party to gain more seats in the next coming election. One way for doing this is to find out what kind of problem in Ontario do people care about so that the Liberal party would know what campaign promises to pursue if elected. We developed a survey on Google Form and simulated it in relation to the real-word circumstances to find out what kind of problem worried people in Ontario the most. We use the simple random sampling method, which means everyone in Ontario has an equal chance of being selected. We used a bar plot to find out which problem is the most challenging for people in Ontario. The bar plot shows "Crime" has the highest count among seven different categories. About 150 people among 500 samples think Crime is the problem that the government should put more attention on. Use this graph as a reference, the Liberal party can decide on which topic should their campaign promise focus on to attract the voters in Ontario. This graph is a guideline to see which area needs to be improved for the Ontario government. The government who can take action on the improvement may bring people in Ontario a better life. One limitation of this report is that all the results are from simulation but not a real word reflection, although we simulated under the real-world circumstances, it may be different from the real respondents. One suggestion for the party would be to take this survey as a template and release an official survey online to gather reflection from people.

#### Discussion

### Survey methodology

In the survey, the population we wish to generalize the findings from is everyone in Ontario. The sampling frame for the Liberal party maybe everyone on their phone number list or everyone who leaves their email address to the Liberal party. Lastly, the sample would be people who take this survey. The sampling method we use for our survey is a simple random sample. In a simple random sample, every member of the population has an equal chance of being selected, which will eliminate the bias.

In considering how to reach the desired respondent, the easiest way is to poll online survey on social media or advertise the survey on the provincial newsletters. The liberal party can also send a dedicated email to their subscribers and people who left their email in the party. Evidence suggests that sending a dedicated email asking people to complete a survey is usually the best way to get a response. Before the election date, the party can also record a short video and request participation in the survey. The ways to reach the respondents, in this case, are easy and straight forward, and the cost will be about \$30,000 (SurveyMonkey, 2020).

Nonresponse bias always happened in a survey. It occurs when some respondents included in the sample do not respond. It decreases the sample size, which leads to an increase of statistical variance. Moreover, some sensitive problems that people refuse to answer will impact our critical results (SurveyMonkey, 2020). We'll take the following steps to reduce non-response bias in our survey:

- 1. All the questions are needed to be filled out. If respondents have some ignored questions, the questionnaire cannot be submitted. It helps eliminate non-response bias resulted from carelessness.
- 2. The questions of the survey are short and simple. We only select the basic background information and the topic we are concerned about the most.
- 3. We'll take some pre-tests in the selected questionnaire platform to ensure our survey runs smoothly for our respondents so that they are more likely to accept our survey request.
- 4. We'll extend our survey collection period to two weeks or more to provide our potential respondents more flexibility to fill out the survey. And we'll send some reminders during the collection time to reduce non-response bias as many as possible.

Finally, we take the following measure to protect respondent privacy:

- 1. We set an option called "prefer not to say" in the sensitive questions of personal background.
- 2. We promise that personal information cannot be provided to other organizations or for other purposes.
- 3. The information collected from respondents cannot be altered by the researcher.

#### Results

Among the 500 questionnaires we sampled, the number of people who voted for the Conservative Party in the last poll accounted for a maximum of 44%. It was followed by the NDP Party with 33% of the vote. The Liberal and the Green Party received 23% and nearly 0% support respectively (Figure 1). However, in the forecast for a new vote, the number of people willing to vote for the Liberal Party soared to 47% (Figure 3). It also shows that the masses are dissatisfied with the performance of the Conservative Party in Ontario. Statistics confirmed this feedback. 55% of the people expressed dissatisfaction with the current government (Figure 2).

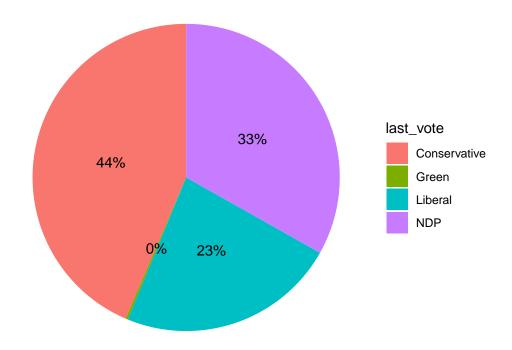


Figure 1: Distribution of which parties the samples voted in the previous election

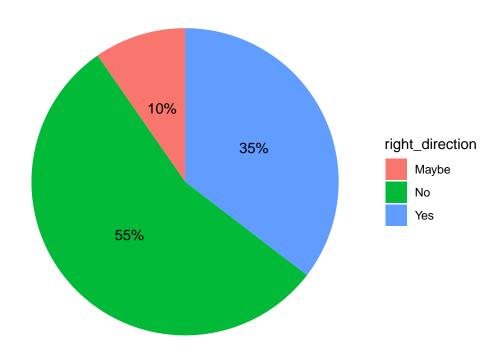


Figure 2: Distribution to question if the existing gov is bringing benefits to country?

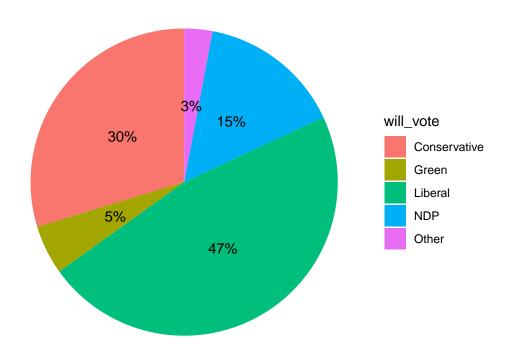


Figure 3: Distribution of which parties to vote for in the next election

The Liberal Party needs to strengthen where it did not do well in the previous government. According to our questionnaire survey, crime has become the most concerned issue (Figure 4), accounting for 31%. There were 490 shootings in Toronto last year and the city also set a record for shooting-related injuries, at 248 (JANUARY 1, 2020). The data also proves that crime incidents have been on the rise in recent years and the problem needs to be solved urgently (Figure 6).

From the perspective of the answering population, our student population is too large (Figure 5), which may be due to the fact that the questionnaire adopts the form of an online questionnaire, which leads to bias.

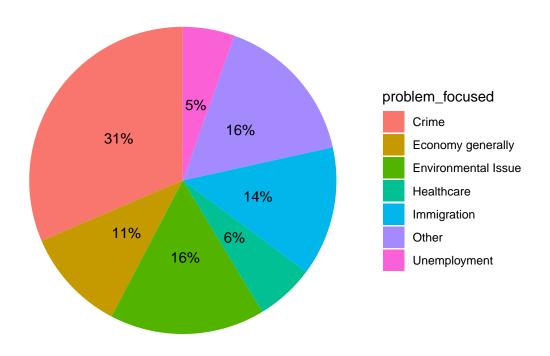


Figure 4: Distribution of questions people focused on

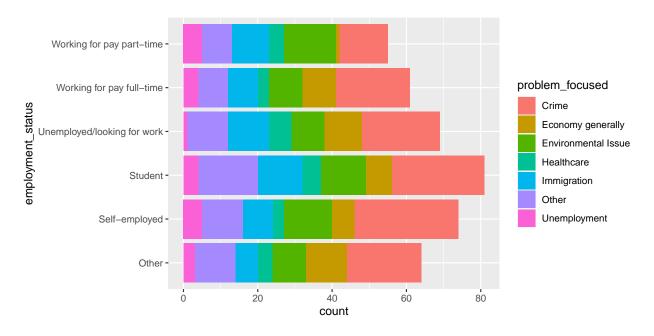


Figure 5: Distribution of employment count

## **Number of shootings in Toronto**

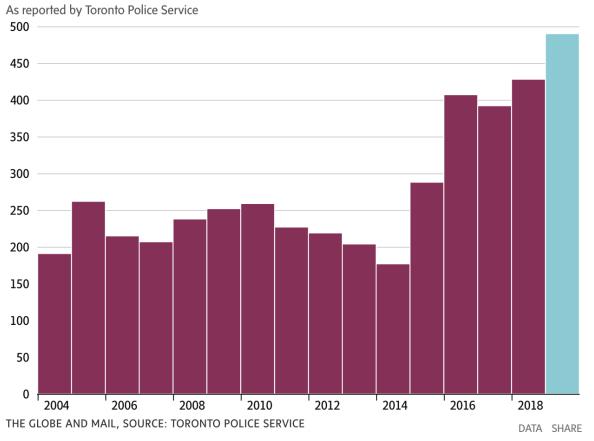


Figure 6: Number of shootings in Toronto

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## Appendix

 $The Survey link down below: \ https://docs.google.com/forms/d/e/1FAIpQLScHpDE2n-2QJevoEdasLFhEeWXmGuGLT8Zq7 formResponse$ 

The code that generates the simulated data can be found here: https://github.com/Xeon0312/sta304-ps2/blob/master/simulation-script.R

The R markdown file that generated this report is here: https://github.com/Xeon0312/sta304-ps2/blob/master/304-simulating.Rmd

github repo: https://github.com/Xeon0312/sta304-ps2

Citizenship Status			
l'm a *			
Can	adian Citizen		
Perr	manent Resident		
Othe	er		

Figure 7: From

## Personal Background

1 Or	1 On what basis do you assess a political candidate? *				
You	can choose as many as you want.				
	News on TV				
	Articles in the newspaper				
	Attend events where the candidate is addressing the people				
	I research all the channels before making my choice				
	Number of fundraisers the candidate has done in you area				
	The family upbringing of the candidate				
	Other				
2 W	hat decade were you born in ? *				
0	1940-1949				
0	1950-1969				
0	1970-1989				
0	1990-2004				
3 H	ow do you identify yourself? *				
0	Female				
0	Male				
0	Prefer not to say				

Figure 8: Q1.1,2,3

	oes your household income fall into one of these broad categories? * o not need exact number, you just need to choose broad categories.
0	No income
0	\$1-\$50,000
0	\$50,000-\$100,000
0	\$100,000-\$150,000
0	\$150,000-\$200,000
0	More then \$200,000
0	Prefer not to say
5 W	hat is the highest level of education that you have completed? *
0	No schooling
0	Elementary school
0	Secondary school
0	College
0	Bachelor's degree
0	Master's degree
0	Professional degree or doctorate
0	Prefer not to say
6 W	hat is your employment status? *
0	Full-time
0	Part-time
0	Self-employed
0	Unemployed/Looking for work
0	Student
0	Other

## Political Leanings

For citizen

1 Which party did you vote in last election: *											
0	Conserva	ative Pai	rty								
0	Green pa	irty									
0	Liberal Party										
0	New Democratic Party										
0	Other										
0	I didn't vo	ote last t	time								
	you thing people of Yes  No  Maybe		•	•	nment i	s going	g in the	right di	irection	i to benef	ït
3 How likely are you to vote in the coming elections: *											
	1	2	3	4	5	6	7	8	9	10	
	$\circ$	0	0	0	0	0	0	0	0	0	

Figure 10: Q2.1,2,3

4 V	Which party do you decide to vote this year: *
0	Conservative Party
0	Green party
0	Liberal party
0	New Democratic Party
0	Don't know
toda	om your perspective, what is the most important problem facing Canada ay? * use the top3 you concern most.
	Economy generally
	Unemployment
	Healthcare
	Crime
	Immigration
	Environmental Issue

Figure 11: Q2.4,5

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1 W	1 What issues do you focus more on? *			
Choo	Choose 3 issues you concerned about most.			
	Economy			
	Employment			
	Public Health			
	Crime and Justice			
	Immigration Policy			
	Tax Policy			
	Environmental Problem			
	Education			
	o you agree with one or more of the following? Select all that apply. *			
	There should be policies to resolve the gap between the rich and the poor.			
	Environment safety is more important than business tax revenue.			
	There should be rules to include all religions in all political parties.			
	The government should assist corporations in increasing employment.			
	The government should pay more on public health programs.			
	There should be more free trade with other countries, even if it hurts some industries in Canada.			

Figure 12: Q3.1,2