

2019 Presidential Election Poll Survey

Project Report



Department of Computer Science and Engineering
University of Moratuwa
Academic Year 2019

K.A.H.P.Perera – 199354R
N.A.H.W.S.Chathuranga - 199309K

Group - Unbiased Estimators

CS5651 - Statistical Inference

Analyzing the opinion on Presidential Election 2020 of Educated Youth Population in Western Province

Research Question:

The main objective of this research is to predict which candidate has the highest chance to win the next presidential election and how will the voter's respond to the national policies that the candidates going to implement in the next five years.

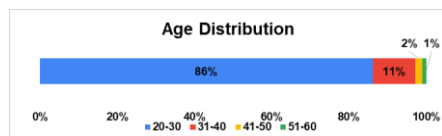
Members with ID and their contribution:

- K.A.H.P.Perera – 199354R (Questionnaire Design , Analyzing Results, Creating Report)
- N.A.H.W.S.Chathuranga - 199309K (Questionnaire Design , Analyzing Results, Creating Report)

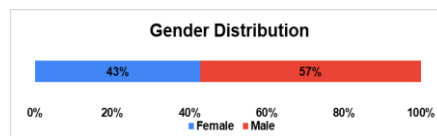
Introduction:

We conducted this survey throughout a week period and we ended up with 218 valid responses. We used a mixed approach to do the data collection in this survey. This include collecting data through online survey and phone survey. Sample of these voters selected randomly to avoid sampling bias. We decided to limit this study to western province and only consider educated youth segment due to the time frame and the cost of data collection. Since educated youth segment can do a significant influence to the overall election results we reframed our objective to identify the candidates popular among educated youth segment in western province and how they prioritize the national policies.

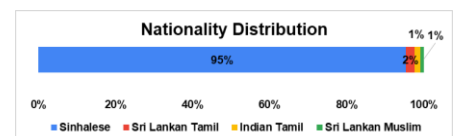
Results and analysis: Sample Distribution



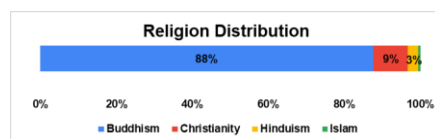
- ~86% of respondents are between ages 20- 30



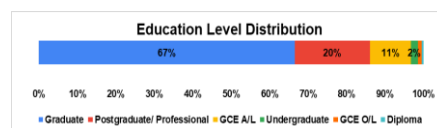
- ~57% of the respondents are male and ~43% female



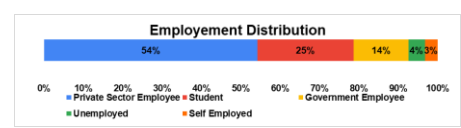
- ~95% of the respondents belongs to Sinhalese



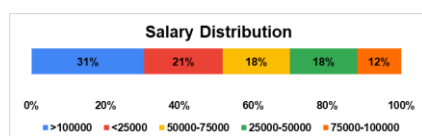
- ~88% of respondents are Buddhists



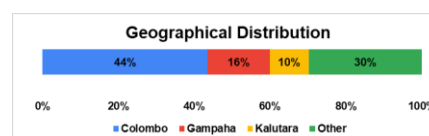
- ~97% of the respondents have GCE A/L or higher education



- ~54% of the respondents are private employees

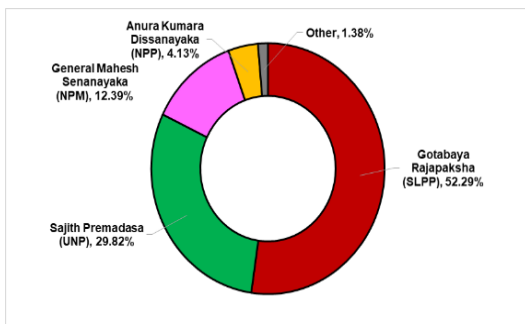


- ~42% of the respondents earns more than 75,000 per month

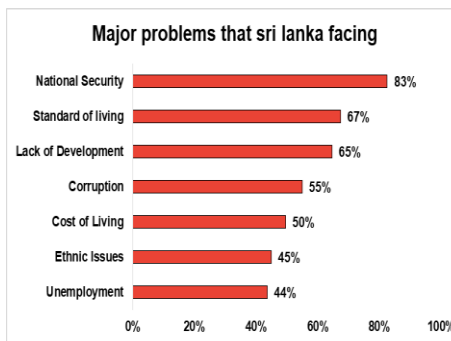


- ~70% of the respondents are from western province and ~44 of them are from Colombo district

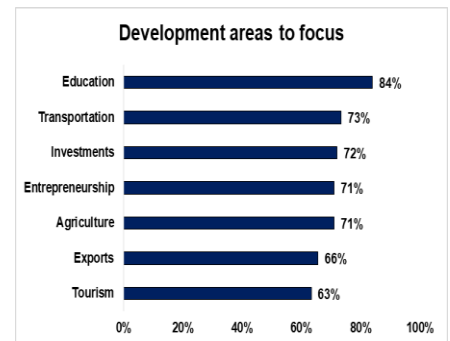
Results and analysis: Analysis of Opinions



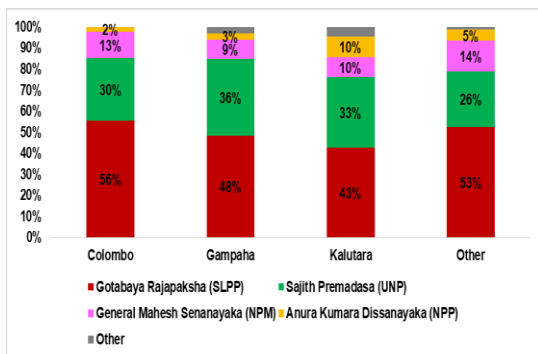
- According to the overall sample Gotabaya has higher chance of winning with a percentage of 52.29%



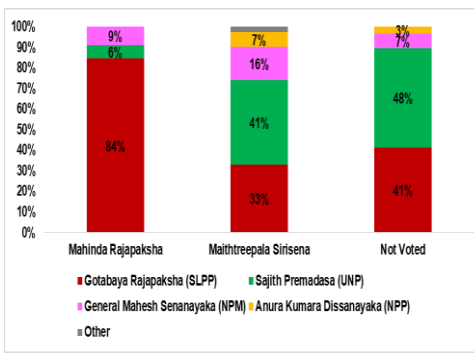
- National Security and Vision for Development seems to be key factors when electing the president



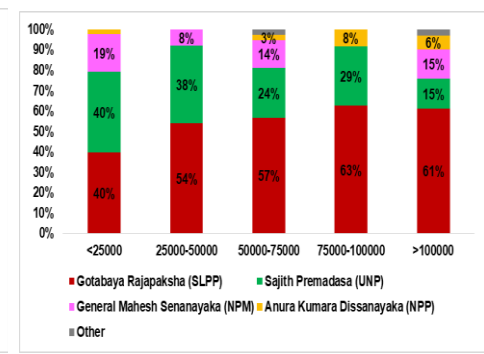
- Education, Transportation and Investments are key areas that appointed presidents should focus



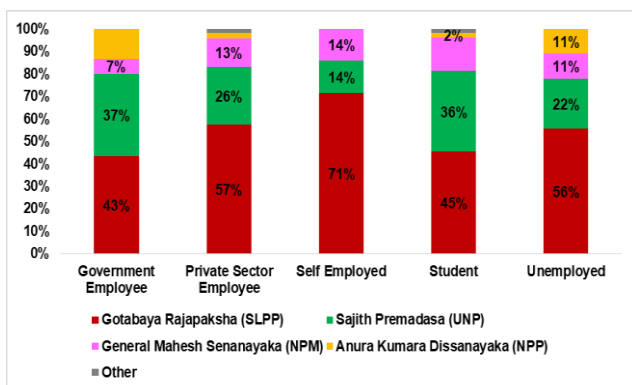
- Colombo has the highest percentage of voters for Gotabaya in the sample which is 56%



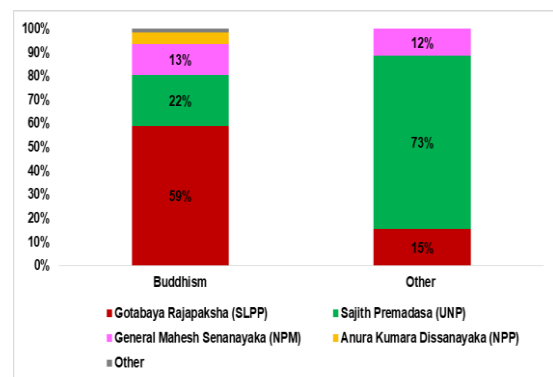
- Majority of the SLPP voters remained in their party while voters who voted UNP last time are going to vote different parties in this election



- SP is somewhat preferred in lower income range people but when it comes higher ranges GR is most preferred candidate to win in this presidential election

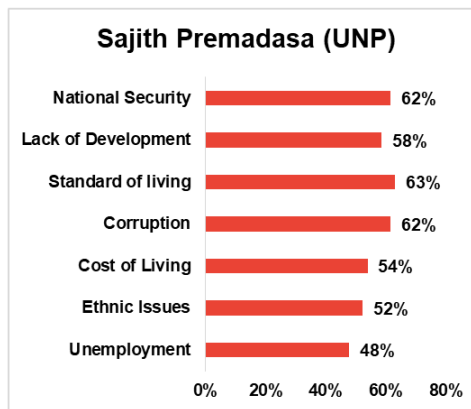
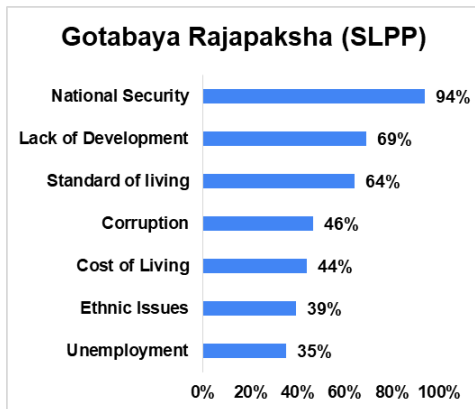


- GR is more preferred among Private Sector and Self Employed people where SP is more preferred among government employees



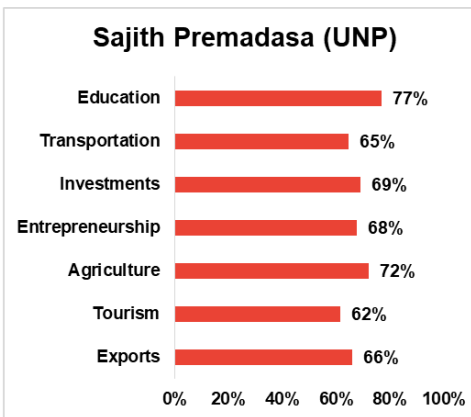
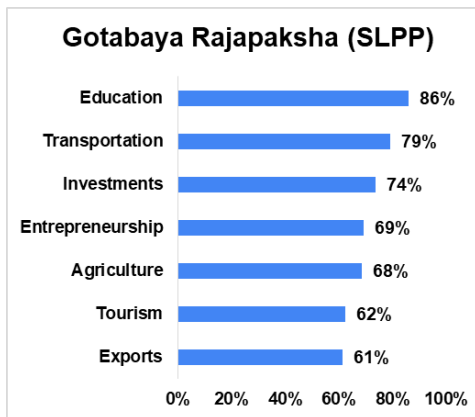
- GR is more preferred among Buddhists where SP is more preferred among Other Religions

Major problems that Sri Lanka facing according to voters of main two candidates



- 94% of respondents preferred GR sees the national security is a major problem in Sri Lanka while only 62% of the respondents proffered SP sees national security is a major problem

Development areas to focus according to voters of main two candidates



- Majority of respondents preferred GR and SP sees education as a major area to focus in Sri Lanka. 79% of the respondents preferred GR sees Transportation as the next major area to focus while 72% of the respondents preferred SP sees the next area to focus is agriculture

Conclusion:

According to the results of this analysis we can see Goatabaya is the most preferred candidate among the educated youth segment in western province. Maithreepala Sirisena's voting base has dropped and distributed to other candidates while Mahinda Rajapaksha's voting base remaining the same. GR is more popular among the high salaried segments than low salaried segments. Also GR is more preferred among Private Sector and Self Employed people where SP is more preferred among government employees. Majority of the respondents sees National Security and Vision for Development are key factors in this election and candidates who have manifestos including strong policies around national security and development have higher chance of get the votes from educated youth segment in western province.

Discussion:

This sample is mostly consists of educated youth segment in western province but there are several age groups and geographies that could do major impacts to the election results. That is one major drawback and if we could expand the scope to other geographies and age segments that would give a better estimate regarding the overall election results. Also some religions and some nationalities are underrepresented in this sample we could improve the result by taking more representative sample for those religions and nationalities.

Git Repo Link - <https://github.com/heshan92/Statistical-Inference-Project>