

ProblemSet2__new

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Abstract

Education is a contributor to many beneficial socio-economic outcomes. We intend to exam the education profile in the selected neighbourhoods of Toronto that have polarized household income from the data set package *Wellbeing Toronto - Demographics: NHS Indicators*. We first observe that the income gap between the neighbourhood with the highest household income and the lowest is enormous. The median household income of Bridle Path-Sunnybrook-York Mills is almost nine times more than Regent Park before tax. Bridle Path-Sunnybrook-York Mills also has a much higher attainment rate (45%) of higher education above a bachelor's degree than Regent Park (23%) and the City of Toronto (27%). We intend to use the comparison to bring awareness of inequality in income and education existing in the City of Toronto.

Introduction

Education is a contributor to many beneficial socio-economic outcomes. In the previous study where we examined the educational profile of Toronto's neighbourhoods, we found that the neighbourhood with the highest median household income has a much higher attainment rate (45%) of higher education above a bachelor's degree than the compared with the lowest (23%) and the City of Toronto (27%). In this study, we extend the examination of educational profile to the residents' academic majors in the following categories— “visual and performing arts and communications technologies”, “humanities”, “social and behavioural sciences and law”, “business_management_and_public_administration”, “physical and life sciences and technologies”, “mathematics computer and information sciences”, “architecture engineering and related technologies”, “agriculture natural resources and conservation”, “personal protective and transportation services” and “no postsecondary certificate diploma or degree”. The question we want to answer is [the question]. [Broader context: education as social mobility]

Dataset and method description

Neighbourhood profile dataset is... Exploratory data analysis is conducted to inspect the dataset.

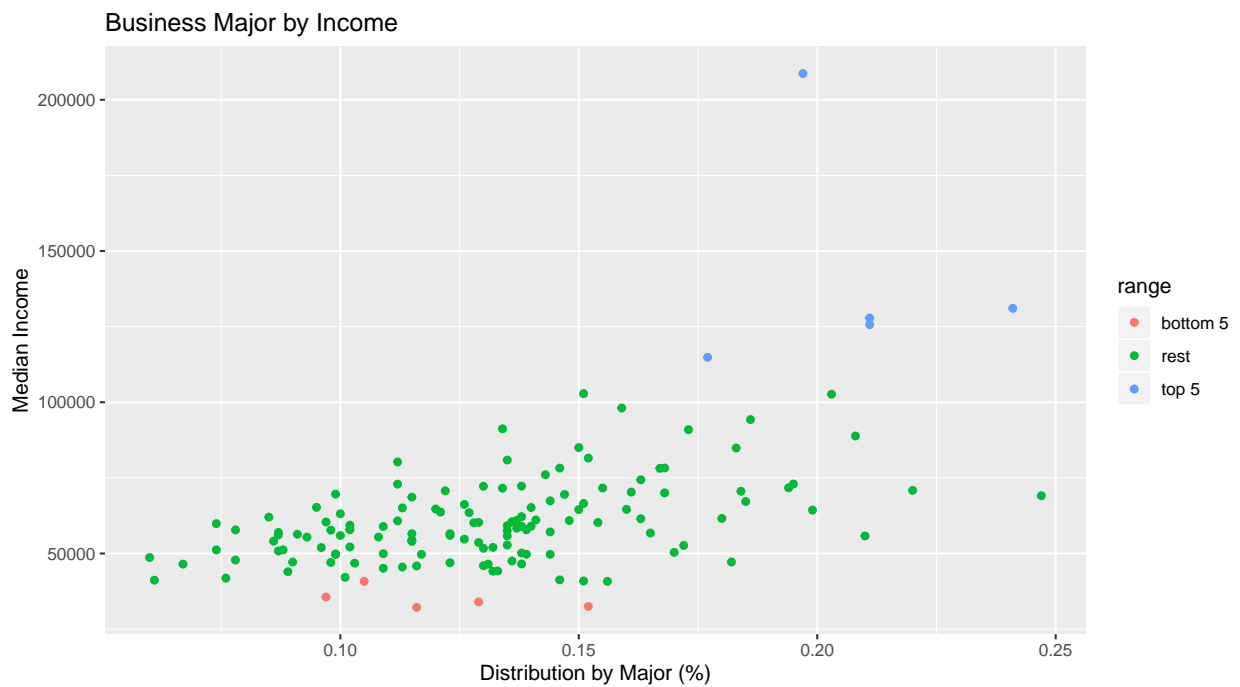
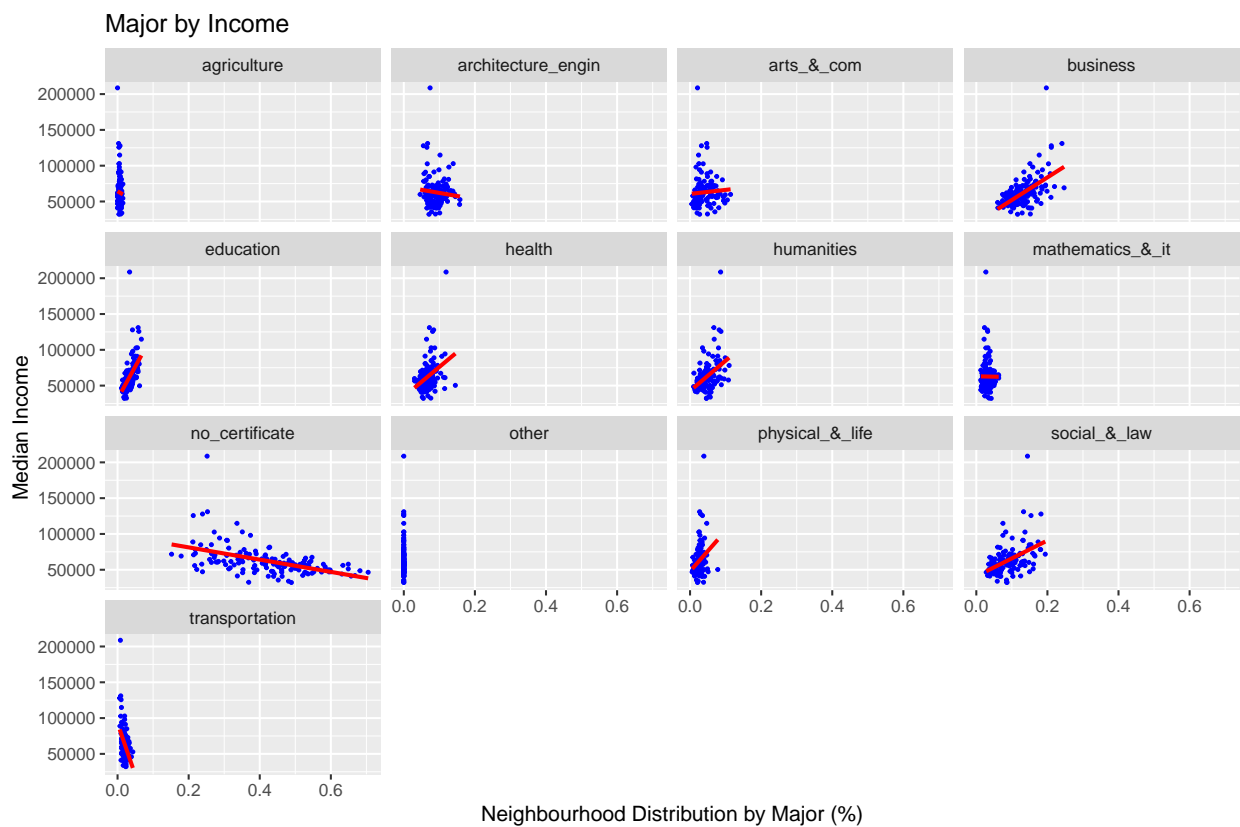
Limitation of the dataset and approach

Although there are datasets for 2001,2006, 2011 and 2016, the structure and available information of the datasets are inconsistent. For example, median total household income for all neighbourhood is only available in the dataset from 2011, therefore this study is limited to the year of 2011 and is unable to provide time-series analysis of the changes in income and education profile of the neighbourhoods.

Ethical considerations

By revealing the [...] Value judgement between academic fields,

Income and Education by Major 2011



Call:

```
## lm(formula = business ~ median_income, data = education_percentage_only)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.073980 -0.021830 -0.001939  0.016623  0.107232
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  7.480e-02  8.125e-03   9.206 4.64e-16 ***
## median_income 9.401e-07  1.227e-07   7.662 2.84e-12 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.03102 on 139 degrees of freedom
## Multiple R-squared:  0.2969, Adjusted R-squared:  0.2919
## F-statistic: 58.71 on 1 and 139 DF,  p-value: 2.835e-12
```

