

Why Do We See More Homeless Men than Women In Toronto?*

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Abstract

The city of Toronto provides a shelter service for people who are homeless in Toronto. We obtain the total number of individuals without any demographic breakdown and we analyze them with graphs and tables. We discovered the number of homeless male is much greater than homeless female. This finding allows us to think about the unemployment rate in Toronto and how women can live better in the Toronto than men

1 Introduction

Homelessness is an issue all around the world where it determines whether the location is comfortable for people to live or not. Some governments give better benefit to these homeless people and some don't. As a person who lived in Toronto for almost four years, I have seen many homeless people on the street everyday. Therefore, it is important to find out the reason behind this common phenomenon and understand the problem behind.

The city of Toronto provides a shelter service for people who are homeless where we want to discover which age group and gender has the highest number. Since we do not care about the population group, the first thing we did is to filter out the population group that equals to "all population". This step allows us to see the entire data as a whole and easier for the readers to understand what our objective is. Next, we have created a table that contains the information of the month and the number of homeless people in different age group. We discovered the age between 25 to 44 has the highest proportion of homeless people. This result makes us wonder about the unemployment rate and the gender bias for getting accepted by a company. Next, we have created graphs for the number of homeless men and women. It is very interesting to see there are much less women than men.

How do women survive better than men in Toronto? The article from Cultural Daily (Daniel Myrick on November 2, 2016) says that women can get a job much easier than men. This is very interesting because men have better stamina than women which many companies we see nowadays do have more men in them. The result from our paper is different from this idea which women seems to be the more powerful group in Toronto. According to the statistics Canada (Population estimates on July 1st, by age and sex), there are more women than men in Ontario in 2020 and 2021. Is this showing a gender bias towards finding a job in Toronto? Or women can rely on men without a job? Since we only have limited amount of information, we cannot conclude anything that is certainly true. However, the result itself can help us to explore and analyze more datasets in other aspects and combine them together to form something meaningful.

The (Table 1) explains which age group is the most commonly seen in the shelter. In (Figure 1) shows the number of homeless male from 2020 to 2021 and we can compare with (Figure 2).

2 Data

To data I used is the "Toronto Shelter System Flow" (Open Data Toronto 2021) where it collects information from the homeless people that are using this government service in a csv file. The limitations within this

*Code and data are available at: https://github.com/nostestwu/starter_folder

Table 1: First ten rows of a dataset of the number of homeless people in different age group

date.mmm.yy.	newly_identified	ageunder16	age16.24	age25.44	age45.64	age65over
Jan-20	901	1440	1227	3893	2852	504
Feb-20	959	1434	1185	3909	2795	511
Mar-20	900	1380	1135	3854	2805	506
Apr-20	469	1234	1050	3518	2644	489
May-20	390	1093	964	3151	2523	476
Jun-20	368	993	889	2939	2381	466
Jul-20	552	911	878	2962	2331	470
Aug-20	628	879	891	3011	2336	463
Sep-20	595	806	895	2988	2390	493
Oct-20	636	764	891	2904	2429	518

dataset are: it does not contain all the homeless people in Toronto since they could be in other overnight services or do not know this service. Next, I have imported this csv file into R studio (R Core Team 2020), where steps are in the other file named “data_download.R”. The libraries I have imported are: opendatatoronto (Gelfand 2020), tidyverse (Wickham et al. 2019), here (Kirill Müller 2020), knitr (Xie Y 2021) and dplyr (Wickham et al. 2021) for data import and data cleaning.

(Table 1) is created by using the knitr package where I first filter out the original dataset that only contains the population group that equals to “All population”. This allows us to consider all the homeless people instead of considering them by families, refugees, etc. Then, I used the slice function to only display 10 rows. The purpose of this table is to see which age group has the highest number of people. People from the age of 25 to 44 has the highest number followed by age 45 to 64. This shows people that are at the working age seem to have a higher chance being homeless.

Next, I decided to look at the gender within these homeless people. (Figure 1) and (Figure 2) are created by using a new library called ggplot2 (Wickham 2016) which allows me to produce two horizontal bar charts and compare them. The results show that men has an average around 5000 people whereas women has an average around 3000.

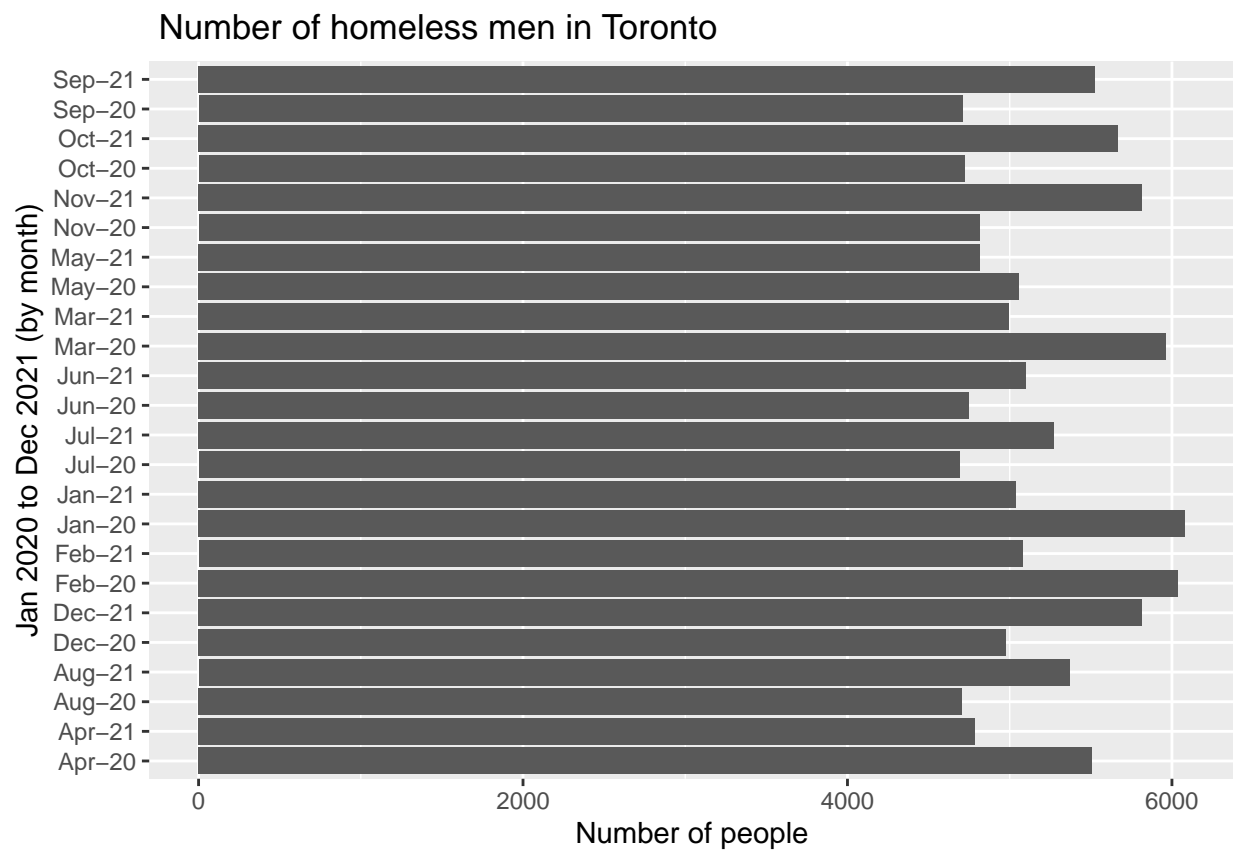


Figure 1: Male

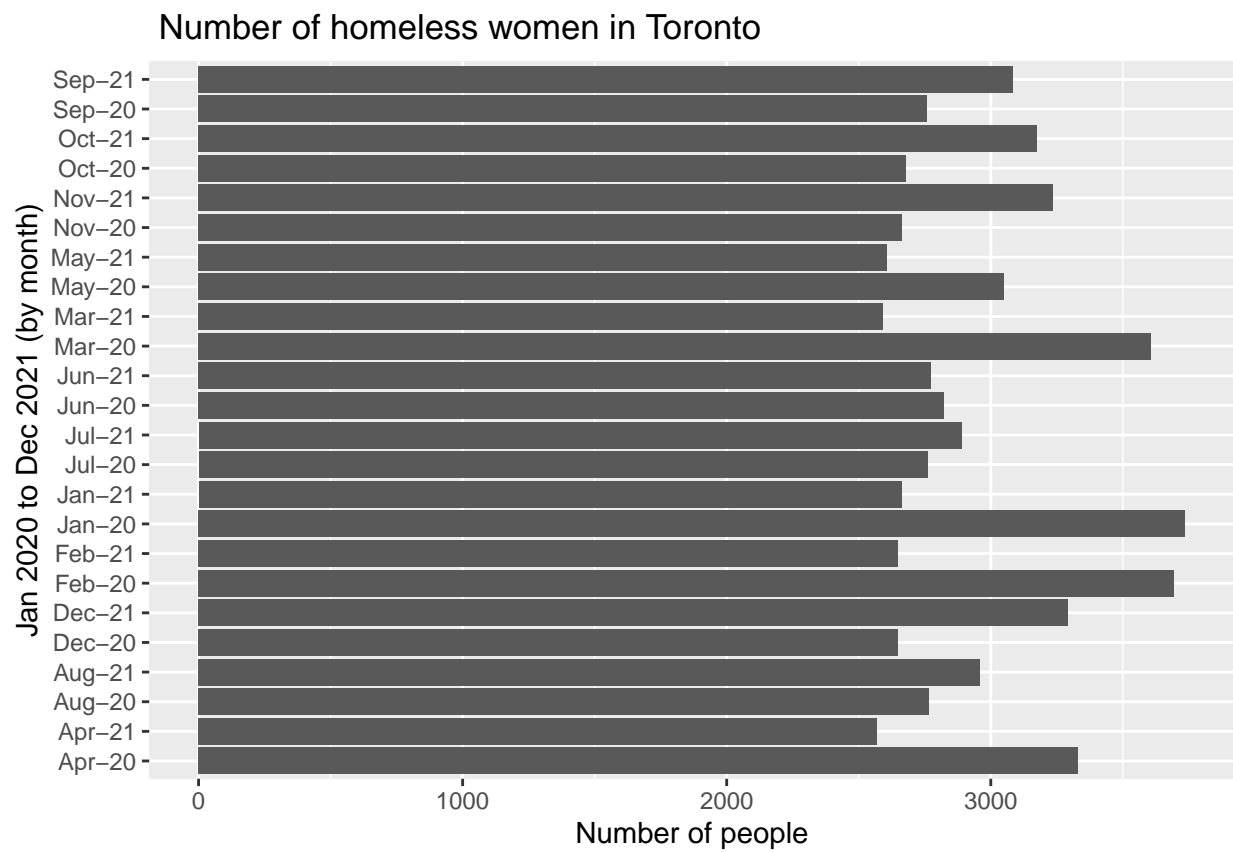


Figure 2: Female

3 References

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