

# Visible Minorities and Economic Inequality: An Examination of Rosedale-Moore Park and Downtown Yonge East\*

Exploring Demographic Disparities in Toronto's Diverse Neighborhoods

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This paper examines socio-economic disparities between two Toronto neighborhoods, Rosedale-Moore Park and Downtown Yonge East, focusing on visible minorities, income, education, and language proficiency. It finds that Rosedale-Moore park has a higher number of non-visible minorities, income levels, educational attainment and linguistic abilities, while Downtown Yonge East experiences greater socio-economic challenges. This research highlights how systemic inequalities across neighborhoods impact social mobility, access to opportunities, quality of education, healthcare access, and overall community cohesion in urban settings.

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\*Code and data are available at: [https://github.com/LexiKnight/neighborhoods\\_toronto/tree/main](https://github.com/LexiKnight/neighborhoods_toronto/tree/main)

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# 1 Introduction

Toronto, one of Canada’s most diverse cities, features neighborhoods with marked socio-economic differences. This paper examines two such neighborhoods: Rosedale-Moore Park and Downtown Yonge East. Despite their proximity, these areas show clear contrasts in ethnic populations, income levels, educational attainment, and language knowledge, highlighting the socio-economic inequalities present in urban centers like Toronto.

Visible minorities in Toronto have become concentrated in specific neighborhoods, driven by economic factors and structural constraints. Research shows that segregation of visible minorities is not solely voluntary; it stems from historical and socio-economic factors that restrict opportunities for many communities (Goel, 2023). In both Rosedale-Moore Park and Downtown Yonge East, the presence of visible minorities varies significantly, shaping community dynamics and resource access. These patterns reflect broader trends in residential segregation and inequality across the city.

Income levels sharply differentiate these neighborhoods. Studies reveal that residential income segregation affects access to resources, services, and overall quality of life (Quick & Revington, 2021). While Rosedale-Moore Park is home to higher-income residents with better access to amenities, Downtown Yonge East faces lower incomes and associated challenges. This income divide plays a critical role in shaping the socio-economic mobility of each neighborhood’s residents.

Educational attainment further distinguishes the socio-economic landscape of these neighborhoods. Higher proportions of residents in Rosedale-Moore Park hold advanced degrees, which corresponds with greater employment opportunities and higher incomes (Goel, 2023). In contrast, Downtown Yonge East shows lower levels of educational attainment, reflecting broader socio-economic inequalities that persist in the city.

Language knowledge, particularly English and French, also plays a key role in shaping socio-economic outcomes. Bilingual individuals in Toronto earn 40% more than unilingual anglophones (Jedwab, 2003). Although both neighborhoods are linguistically diverse, proficiency in official languages affects employment prospects and access to services, reinforcing the socio-economic divides seen between Rosedale-Moore Park and Downtown Yonge East.

The remainder of this paper is structured as follows: Section 2 presents the methods used to analyze these demographic differences, followed by Section 3, which details the results of the comparison between Rosedale-Moore Park and Downtown Yonge East. Section 4 offers a discussion of the findings, highlighting the implications for understanding residential segregation in Toronto. Finally, Section 5 concludes with a reflection on the limitations of the study and suggestions for future research directions.

## 2 Data

### 2.1 Software and R-packages

This project was created using statistical software, R (R Core Team, 2023). For data simulation and manipulation, the `tidyverse` (Wickham, Averick, et al., 2024) package was utilized. This included the use of `dplyr` (Wickham, François, et al., 2024) for tasks such as filtering, summarizing, and joining datasets, as well as `stringr` (Wickham, 2024a) for text processing.

For downloading datasets, the `httr` (Wickham, 2024b), `readxl` (Wickham & Bryan, 2024), and `tidyverse` (Wickham, Averick, et al., 2024) packages were employed, facilitating the efficient retrieval and import of data.

During the data cleaning phase, the `readr` (Wickham, Hester, et al., 2024) package was employed for efficient reading of rectangular text data, and `dplyr` (Wickham, François, et al., 2024) was utilized for various data cleaning tasks.

To ensure the accuracy of the dataset and its related functions, unit testing was performed using the `testthat` (Wickham et al., 2024a) package, and `here` (Müller, 2024) was used for managing file paths and organizing the project structure.

For visualizing the data, `ggplot2` (Wickham et al., 2024b) was employed to create the graphs, while `showtext` (Qiu, 2024) was utilized to enhance the aesthetics of the graphs by enabling custom fonts.

## **2.2 Methodology**

The data for this study were collected from a comprehensive database detailing 158 neighborhoods in Toronto, consisting of 2,604 rows that capture demographic, social, and economic characteristics. These neighborhoods, outlined in the 1990s by the City of Toronto, remain consistent for comparative analysis across Census years. The data, collected prior to April 2021, is sourced from opendatatoronto (“Open data toronto,” 2024).

### **2.2.1 Data Collection**

I obtained data on individuals from two neighborhoods, comparing differences in ethnic backgrounds, income levels, highest education attained, and knowledge of Canada’s official languages. Rosedale-Moore Park and Downtown Yonge East were selected for their proximity and expected demographic contrasts.

### **2.2.2 Data Cleaning**

In my data cleaning process, I focused on the relevant columns representing the neighborhoods Rosedale-Moore Park and Downtown Yonge East. I filtered the dataset to include categories for both visible minorities and non-minorities. For income attainment, I grouped the data into annual income categories, starting from under 10,000 dollars and increasing in increments of 10,000 dollars, based on after-tax income.

Additionally, I included education categories that reflect the highest level of education completed, ensuring to retain specific categories while excluding broader classifications such as “postsecondary certificate, diploma, or degree” and “bachelor’s degree or higher” to enhance clarity and focus. .

### **2.2.3 Data Analysis**

To compare the neighborhoods, I created four bar charts representing ethnic groups, income levels, highest education attained, and knowledge of official languages. Each chart illustrated the number of individuals on the y-axis, with respective categories on the x-axis, facilitating visual comparison. This approach allowed for clear assessments of demographic disparities without relying on summary statistics.

## **2.3 Features**

The dataset comprises key features compared between the two neighborhoods, including ethnicity, income, highest level of education, and knowledge of the official language.

### 2.3.1 Ethnicity

In this study, I analyzed the distribution of minority and non-minority groups within the selected neighborhoods, focusing on nine specific minority groups, a category for individuals identifying with multiple minority groups, and a category for non-minorities. This metric serves as an important indicator of individuals' cultural and religious backgrounds. By examining these distributions, I aimed to assess whether there is a greater presence of visible minority groups in Downtown Yonge East compared to Rosedale-Moore Park. Understanding these trends is essential for exploring the socio-cultural dynamics within the neighborhoods.

Figure 1 illustrates the proportion of ethnic groups in each neighborhood. The x-axis displays the ethnic groups, while the y-axis represents the number of individuals within each category. The grouped bar charts provide a clear comparison between the two neighborhoods. Notably, there is a significant trend showing that individuals identifying as non-visible minorities predominantly reside in Rosedale-Moore Park. In contrast, the visible minority groups that differ most between the two neighborhoods include Chinese, South Asian, Black, and Arab. All other ethnic groups have relatively similar numbers of individuals in both neighborhoods.

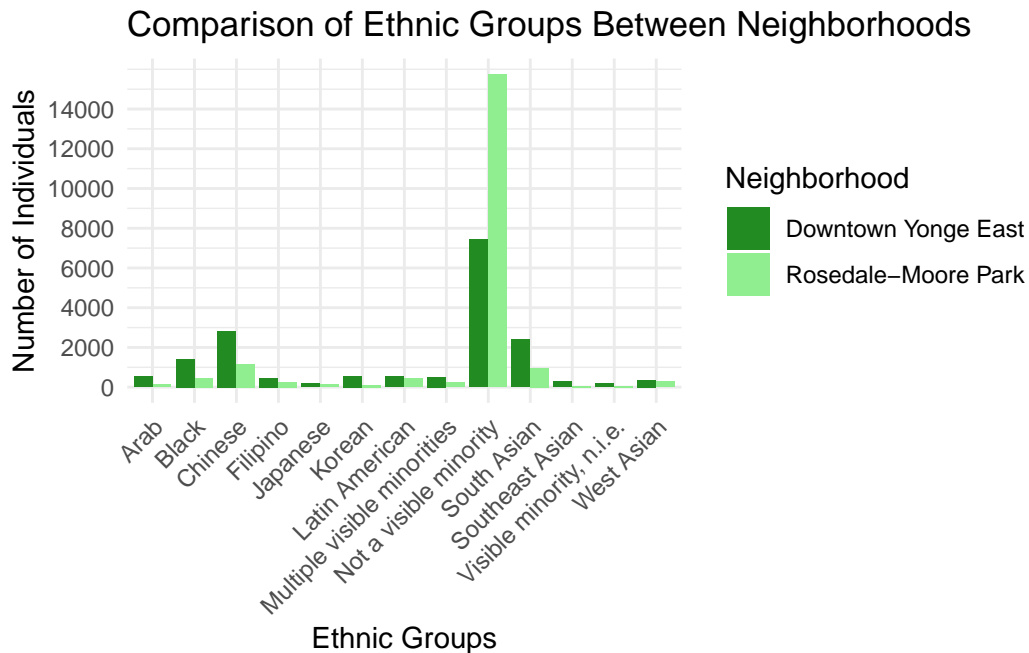


Figure 1: The chart illustrates the distribution of various ethnic groups across two Toronto neighborhoods, Rosedale-Moore Park and Downtown Yonge East, highlighting differences in ethnic diversity.

### 2.3.2 Income

Another key feature analyzed in this study is the distribution of income levels among residents in the selected neighborhoods. The income categories augment by 10,000 dollars, offering insight into the economic standing of individuals within each neighborhood. This metric serves as a significant indicator of socioeconomic status, which can highlight income disparities between Downtown Yonge East and Rosedale-Moore Park.

Figure 2 illustrates the income distribution for each neighborhood, with the x-axis displaying the income categories and the y-axis representing the number of individuals in each category. In examining Figure 2, the data shows that Rosedale-Moore Park tends to have a higher concentration of individuals in the 100,000 dollars and above categories. In contrast, Downtown Yonge East has a greater representation in income brackets below 50,000 dollars, particularly in the 20,000 to 30,000 dollars range. There is an even distribution across both neighborhoods in the middle-income categories (50,000 to 90,000 dollars).

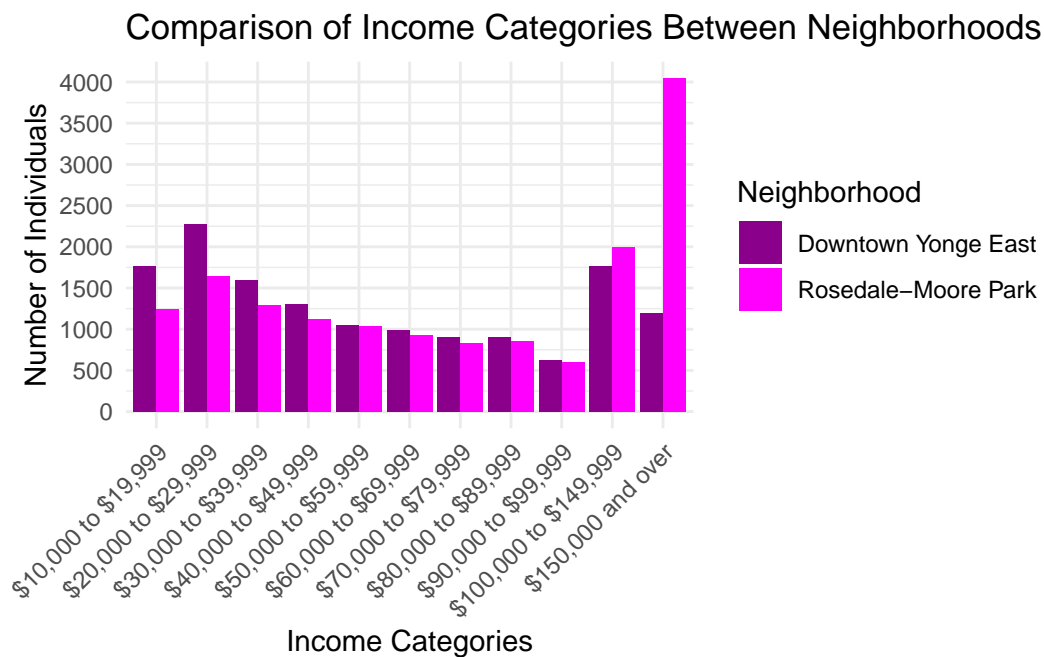


Figure 2: This bar chart compares the distribution of income categories in Rosedale-Moore Park and Downtown Yonge East, highlighting significant differences in income distribution and reflecting their economic diversity.

### 2.3.3 Highest Level of Education

Another important aspect explored in this study is the distribution of educational attainment among residents in the selected neighborhoods. The education categories range from no certificate or diploma to bachelor's degree or higher, allowing for a broad analysis of residents' qualifications. This metric is crucial for understanding the skill levels within the neighborhoods and provides insights into access to employment opportunities and economic mobility.

Figure 3 illustrates the distribution of the highest levels of education attained in each neighborhood. The x-axis represents the education categories, while the y-axis shows the number of individuals within each category. Overall, the data shows that most levels of educational attainment are evenly distributed between the two neighborhoods. However, for advanced degrees—master's and earned doctorates—Rosedale-Moore Park has a higher concentration of individuals. On the other hand, foundational levels of education, such as non-university certificates or diplomas, are similarly distributed between both areas.

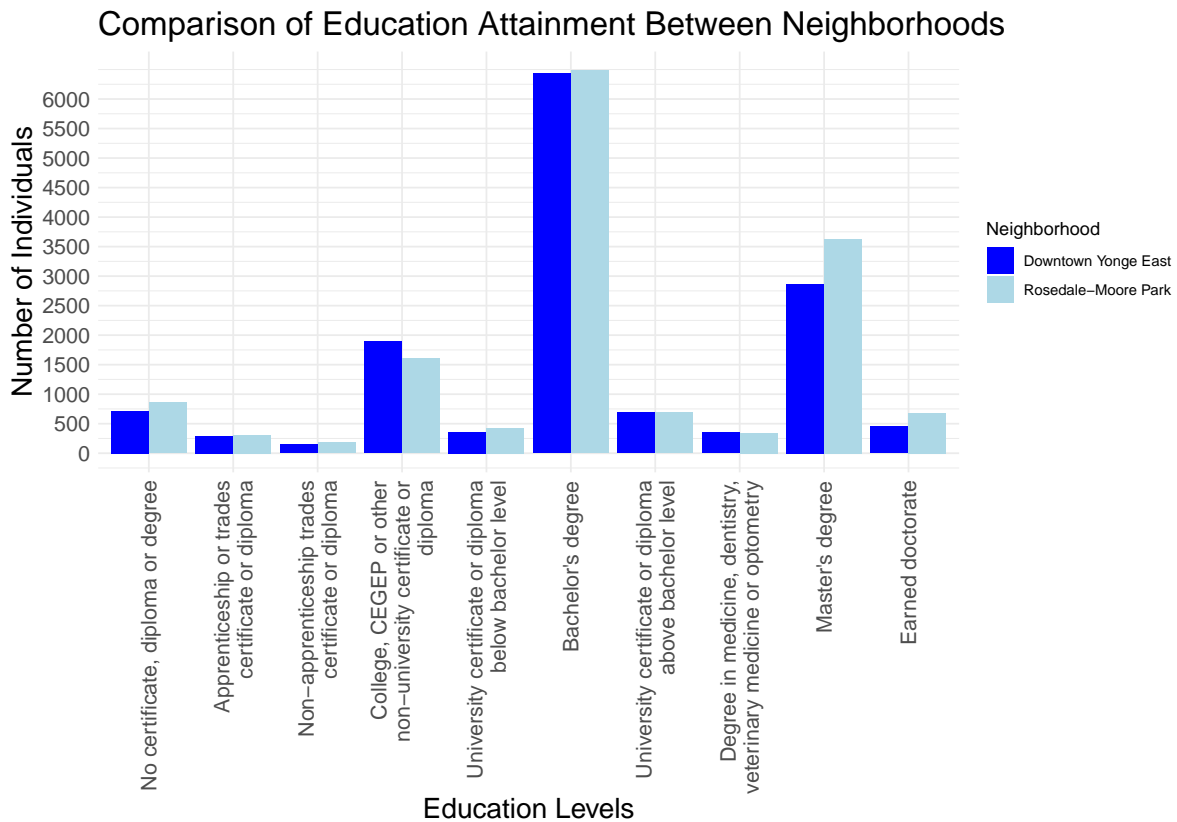


Figure 3: This bar chart illustrates the distribution of educational attainment levels in Rosedale-Moore Park and Downtown Yonge East, revealing disparities in educational qualifications and differences in access to education opportunities.

### 2.3.4 Knowledge of Official Language

A further element examined in this study focuses on the distribution of knowledge of Canada's official languages among residents in the selected neighborhoods. The language categories examined are "English only," "French only," "English and French," and "Neither English nor French." This metric serves as an important indicator of linguistic capabilities and can reflect levels of cultural integration, community engagement, and access to resources in a bilingual country like Canada.

Figure 4 illustrates the distribution of knowledge of official languages across Rosedale-Moore Park and Downtown Yonge East. The x-axis represents the various language categories, while the y-axis displays the number of individuals in each category. The data reveals that Rosedale-Moore Park has a higher proportion of residents who speak only English and those proficient in both official languages (English and French). The "Neither English nor French" category is relatively small in both neighborhoods, though slightly more common in Downtown Yonge East. There is also a minimal presence of individuals who speak only French, with none in Rosedale-Moore Park and very few in Downtown Yonge East.

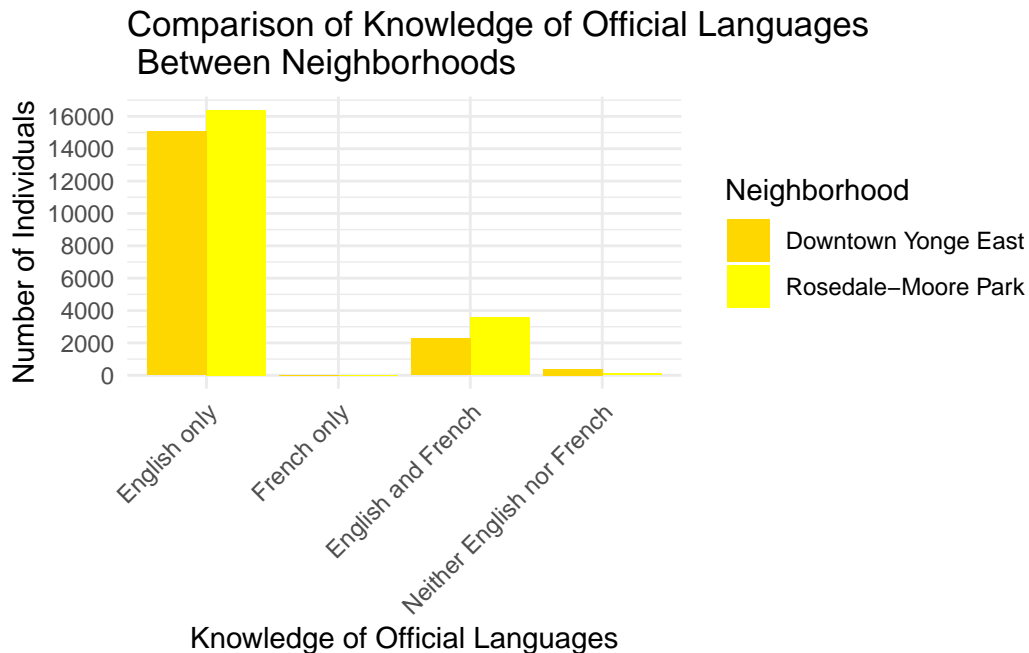


Figure 4: This bar chart depicts the distribution of knowledge of official languages among residents of Rosedale-Moore Park and Downtown Yonge East, highlighting variation in language knowledge, reflecting their diverse linguistic profiles.



### 3 Results

The following results present a comparative analysis of Rosedale-Moore Park and Downtown Yonge East across four key demographic dimensions: ethnicity, income levels, educational attainment, and knowledge of official languages. Figures illustrating these distributions are provided below.

#### 3.1 Ethnicity Distribution

Figure 1 presents the distribution of ethnic groups in Rosedale-Moore Park and Downtown Yonge East. The results show that Rosedale-Moore Park has a significantly higher number of non-visible minorities compared to Downtown Yonge East, with more than double the population in this category. Among visible minority groups, the South Asian and Chinese communities are the most prominent in both neighborhoods; however, Downtown Yonge East exhibits a greater overall presence of visible minorities, including notable representation from Black and Arab communities.

This disparity suggests that the downtown area is more culturally diverse, potentially influencing social dynamics and access to community resources. On the other hand, Rosedale-Moore Park is predominantly composed of non-visible minorities, indicating that the neighborhood may be more homogenous in terms of ethnicity.

#### 3.2 Income Distribution

Figure 2 reveals a distinct pattern in income levels between Rosedale-Moore Park and Downtown Yonge East. Rosedale-Moore Park has a significantly higher proportion of residents earning 100,000 dollars and above, underscoring its more affluent profile. In contrast, Downtown Yonge East displays a much larger concentration of individuals earning between 20,000 and 39,999 dollars, suggesting potential economic challenges in this downtown area. The presence of lower-income residents in a central urban neighborhood may raise concerns about housing affordability, cost of living, and the accessibility of resources.

This income disparity highlights the economic diversity within Toronto's neighborhoods, with Downtown Yonge East exhibiting a wider range of lower-income residents, possibly students or individuals in temporary or precarious employment. The broader implications of these trends can inform discussions on economic equity, urban planning, and the support structures available for lower-income populations in dense urban environments.

### 3.3 Highest Level of Education Attained

In Figure 3, the distribution of educational attainment reveals a higher proportion of residents with master's degrees and earned doctorates, indicating a concentration of highly educated individuals in this area. This suggests that residents in Rosedale-Moore Park may have greater access to advanced education and may occupy higher-skilled, higher-paying jobs as a result. The prevalence of advanced degrees could reflect the neighborhood's socioeconomic advantages, including access to better schooling, resources, and career opportunities.

In contrast, both neighborhoods exhibit similar numbers of residents with only a non-university certificate or diploma, pointing to a shared foundational level of education. This parity in basic education highlights the need for equitable access to educational resources across Toronto's neighborhoods. The differing levels of higher education in Rosedale-Moore Park and Downtown Yonge East may contribute to social and economic divides, suggesting that policy efforts aimed at improving access to advanced education could help foster greater social mobility and workforce diversity across urban areas.

### 3.4 Knowledge of Official Languages

In Figure 4, the distribution of knowledge of Canada's official languages highlights several key trends. Rosedale-Moore Park shows a greater proportion of residents who speak only English or both languages, suggesting stronger linguistic integration with Canada's official languages in this neighborhood. This may be attributed to the area's educational or socioeconomic advantages, which often correlate with bilingualism and access to more diverse opportunities. The presence of bilingual residents could also reflect the neighborhood's international connections or professional class.

Conversely, Downtown Yonge East has a slightly higher proportion of individuals who speak neither official language, raising questions about language barriers and social integration in the downtown area. This might indicate a higher presence of recent immigrants or communities where English and French are not dominant languages. While the number of only French speakers is minimal in both neighborhoods, this analysis reveals the importance of supporting linguistic diversity and providing community resources to foster greater inclusivity for non-official language speakers in Toronto.

## **4 Discussion**

### **4.1 Ethnic Group Distribution**

The demographic contrasts between Rosedale-Moore Park and Downtown Yonge East highlight significant implications for community dynamics. Rosedale-Moore Park's predominance of non-visible minorities suggests a more homogeneous cultural environment, which may limit cultural exchange and social resource availability. In contrast, Downtown Yonge East's diversity fosters rich cultural interactions but may also present challenges in resource allocation and community cohesion. Understanding these dynamics is essential for developing targeted social programs that address the unique needs of each neighborhood.

### **4.2 Income Distribution**

The stark socioeconomic divide between the neighborhoods raises critical concerns about urban equity. The concentration of lower-income residents in Downtown Yonge East may lead to issues such as housing insecurity and limited access to essential services. These economic disparities necessitate strategic interventions from policymakers and community organizations aimed at improving access to affordable housing and comprehensive social services, thereby ensuring equitable development across Toronto's neighborhoods.

### **4.3 Education Attainment**

While educational attainment appears relatively balanced, Rosedale-Moore Park's higher representation of individuals with advanced degrees indicates a correlation between education and income. This relationship emphasizes the need for equitable access to quality education in lower-income neighborhoods like Downtown Yonge East. Programs focused on enhancing educational resources, mentorship opportunities, and vocational training could play a pivotal role in bridging the educational divide and improving economic outcomes for residents.

### **4.4 Language Proficiency**

The analysis of language proficiency shows that Rosedale-Moore Park has a greater proportion of residents who speak only English or both official languages. This suggests stronger linguistic integration with Canada's official languages, likely due to the area's educational and socioeconomic advantages. Conversely, Downtown Yonge East has a higher proportion of individuals who speak neither official language, indicating potential language barriers and social integration challenges. This disparity highlights the importance of providing resources to support linguistic diversity and inclusion for non-official language speakers in Toronto.

## 4.5 Weaknesses

While the study provides valuable insights, the reliance on census data may not capture the most current demographic shifts, as population dynamics can change rapidly. Additionally, the analysis focused on only two neighborhoods, which may not represent broader trends across Toronto. Future research should consider a larger sample size and more recent data to enhance the robustness of findings.

## 4.6 Future Directions

Future studies could explore the underlying factors contributing to the demographic differences observed in this analysis. Investigating the role of local policies, housing markets, and community support systems in shaping these neighborhoods could provide a deeper understanding of urban dynamics. Longitudinal studies examining trends over time would help identify shifts in demographic patterns and their implications for community development.

## 5 Conclusion

This analysis highlights the importance of understanding demographic, socioeconomic, and linguistic disparities between neighborhoods like Rosedale-Moore Park and Downtown Yonge East. The findings reveal contrasts in ethnic composition, income levels, educational attainment, and language proficiency, reflecting the diverse experiences of residents in these urban environments. Such disparities require targeted interventions that address the unique challenges faced by each community. By promoting equitable access to resources, educational opportunities, and support services, policymakers and community organizations can work towards building inclusive urban environments that benefit all residents. Future research should continue to explore the interplay of these factors to develop strategies for promoting social cohesion and equitable development across Toronto's neighborhoods.

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