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Author: Kaipeng Wang

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Neighborhood Mobility and Fruit/Vegetable Consumption in New York City Kaipeng Wang, MSW (wangbh@bc.edu), Boston College School of Social Work

Abstract

Previous research on dietary behaviors has highlighted the impact of availability of grocery stores in the neighborhood. However, neighborhood mobility may be another important contributing factor that has not been investigated. Drawing data from Walk Score[®] and the 2013 New York City Community Health Survey, the author used ArcGIS 10.3 to map and examine the spatial patterns of neighborhood mobility (including Walk Score, Transit Score and Bike Score) and fruit/vegetable consumption among 42 neighborhoods in New York City.

Data Source and Methodology

- The 42 neighborhoods were defined by the United Hospital Fund. \bullet (http://www.nyc.gov/html/doh/downloads/pdf/ah/zipcodetable.pdf)
- Neighborhood mobility was measured by Walk Score, Transit Score and Bike Score. Data were drawn from Walk Score[®] data published by Front Seat Management.
 - Walk Score of each neighborhood is the population-weighted mean Walk Score for each constituent zip code.
 - Bike Score and Transit Score of each neighborhood are the _____ arithmetic mean of the scores of each constituent town.
- Percentage of population consuming at least two servings (1 cup) of \bullet fruits and vegetables in total per day for each neighborhood was estimated based on data from the 2013 New York City Community Health Survey.

Results

- In general, neighborhoods with higher Walk Score, Transit Score and Bike \bullet Score seem to have higher percentage of population consuming at least 2 servings of fruits/vegetables daily.
 - Most neighborhoods in Manhattan have high neighborhood
 - mobility, as well as high consumption of fruits/vegetables.
 - North Bronx, Brooklyn and Queens neighborhoods have ____ moderate mobility and moderate consumption of fruits/vegetables
 - However, this association is not consistent across all neighborhoods.
 - South Bronx neighborhoods have high or moderate mobility but low consumption of fruits/vegetables.
 - State Island neighborhoods have low mobility, but moderate ____ consumption of fruits/vegetables.



The association between neighborhood mobility and fruit/vegetable consumption should be further investigated through spatial analysis and hypothesis testing after adjusting for availability of grocery stores.

- Retrieved from: http://www.nyc.gov/html/doh/html/data/chs-data.shtml
- 2. Front Seat Management. (2016). Walk Score. Retrieved from: <u>https://www.walkscore.com/</u>

Future Work

References

1. The NYC Department of Health and Mental Hygiene. (2013). Community Health Survey: Public Use Data.