Streetlight and Transport Walking

Tharindu Bandara

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Data preparation

The same steps followed as Gavin did for his 2014 paper (chapter 3).

- Excluded the participants who moved residence in between surveys
- Excluded the respondents who were not the same person at each wave
- Excluded the respondents who had missing values for transport walking for all waves
- Excluded the participants who had missing values for education

Streetlight count

Streetlights is the built environment attribute of interest.

• Street light BE attribute is measured as 1km network buffer of residence.

2.1 Descriptives

 ${\bf 2.1.1} \quad {\bf Descriptive \ statistics \ of \ Streetlight \ counts \ at \ each } \\ {\bf wave.}$

2.1.2 Distribution

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2.2 One-way ANOVA tests

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Sample Profile

Never walker is defined as participants who reportedly didn't walk for transport at each wave they responded to.

Cross Sectional Analysis

Excluded movers (n = 1916 participants), as most of them do not have street-light counts after the 1st wave. Therefore, streetlight count measured at wave 1 used for this cross-sectional analysis at each wave.

Transport walking:

- Walked or not (logistic regression)
- Minutes of walking (linear regression, only with walkers)

BE attribute:

• Baseline streetlight counts

Adjusted for:

- Sex
- Baseline age
- Baseline education level (categorical)
- Baseline occupation level (categorical)
- Baseline income level (categorical)
- Baseline neighbourhood disadvantage quintiles (categorical)

Longitudinal Analysis

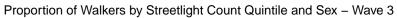
5.1 Plots

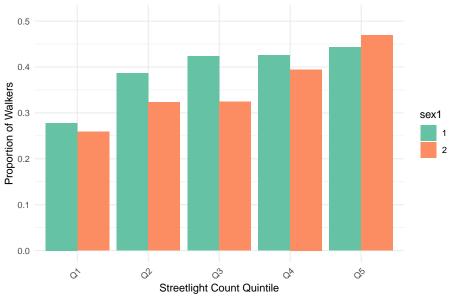
5.1.1 Proportion of transport walkers Vs streetlight count by sex





5.1. PLOTS 15





Proportion of Walkers by Streetlight Count Quintile and Sex - Wave 4

