## Streetlight and Transport Walking

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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

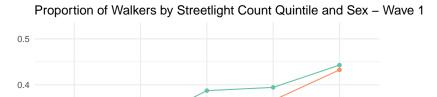
#### Adjusted for:

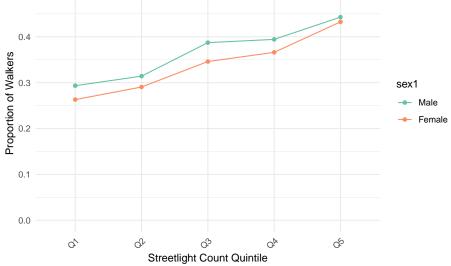
- Sex
- Baseline age
- Baseline education level (categorical)
- Baseline occupation level (categorical)
- Baseline income level (categorical)
- Baseline neighbourhood disadvantage quintiles (categorical)

Longitudinal Analysis

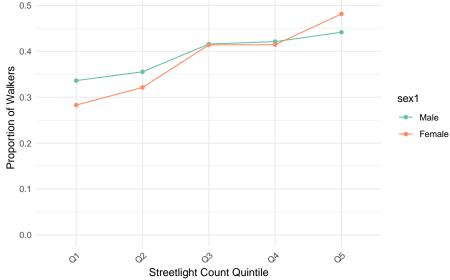
#### 5.1 Plots

### 5.1.1 Proportion of transport walkers Vs streetlight count by sex



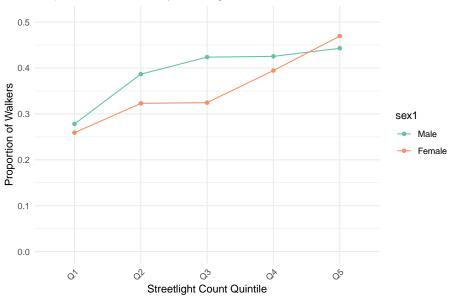






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Proportion of Walkers by Streetlight Count Quintile and Sex - Wave 3



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

