



Nottingham Trent  
University

# Testing the Association between Household Profile and Burglar Alarm Effectiveness

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# Overview

- ***Previous Research***
- ***What I have done so far***
  - Data used
  - Approach
  - Findings
  - Limitations
- ***What I plan to do next***

# Previous Research (utilising CSEW data)

- **Particular combinations are more effective than others**
- **WIDE**
- **Presence of burglar alarms appear to *increase* the likelihood of burglary victimisation**
- **Recent research on burglar alarm impact in isolation and in combination with other devices**  
(Home Office and College of Policing Safer Streets Fund Toolkit)

Tseloni et al (2014; 2017); Thompson et al 2018; Tilley et al 2015; Tseloni et al 2021

# Research Question

**Does the presence of a visible burglar alarm increase or decrease burglary victimisation risk amongst various population groups?**



**Non-Victim Form**

**Sample size:  
125,150 Dwellings**



**Crime Survey for England and Wales (2014/15 – 2017/18)**

# Which of the following are visible at the sampled address?

1. Burglar alarm
2. Security gate/grill over front door
3. Bars/grills on **any** windows
4. CCTV camera
5. Security gate at entrance to property/estate
6. Estate security/block security/guards
7. Entry phone
8. Other visible security devices
9. None of these
10. Unable to code

*Electronic Contact Sheet for Interviewer (Section 3.1) of CSEW Questionnaire (2017/18)*

*How burglar alarms' effectiveness may differ across population groups*

# Findings



# Household Characteristics that were analysed

- Number of years at address
- Lone Parents (yes or No)
- HRP Sex
- HRP Ethnicity
- HRP Marital Status
- Number of Adults
- Number of Children
- Household Income
- Number of Cars
- HRP Occupation
- HRP Disability or Illness
- HRP Education
- Tenure
- Type of Accommodation
- Inner City or Urban/Rural
- Region
- Housing Deprivation
- Income Deprivation

Following charts show **ONLY** results where risk is higher **WITH** than without a burglar alarm



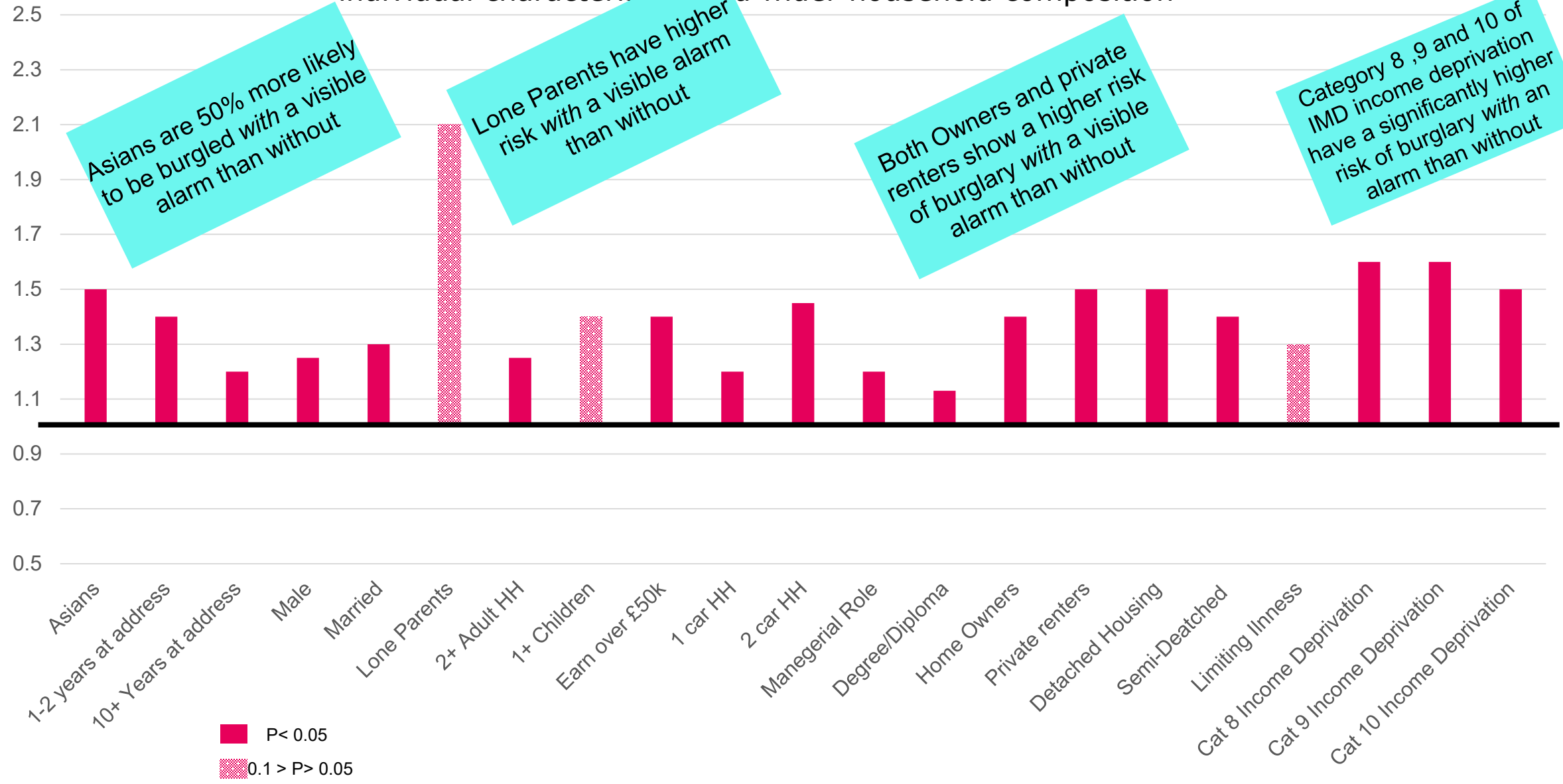
# How was it Calculated?

**Odds ratio of risk of burglary victimisation for the given population group WITH a visible burglar alarm - compared to without one**

**E.g. Males are 1.5 times more likely to experience attempted burglary WITH a visible alarm than males without a visible alarm.**

# Odds Ratio - Burglary victimisation risk WITH a visible burglar alarm compared to WITHOUT one across individual characteristics and wider household composition

Odds ratio of Higher or lower risk of burglary victimisation WITH an alarm than without



Asians are 50% more likely to be burgled with a visible alarm than without

Lone Parents have higher risk with a visible alarm than without

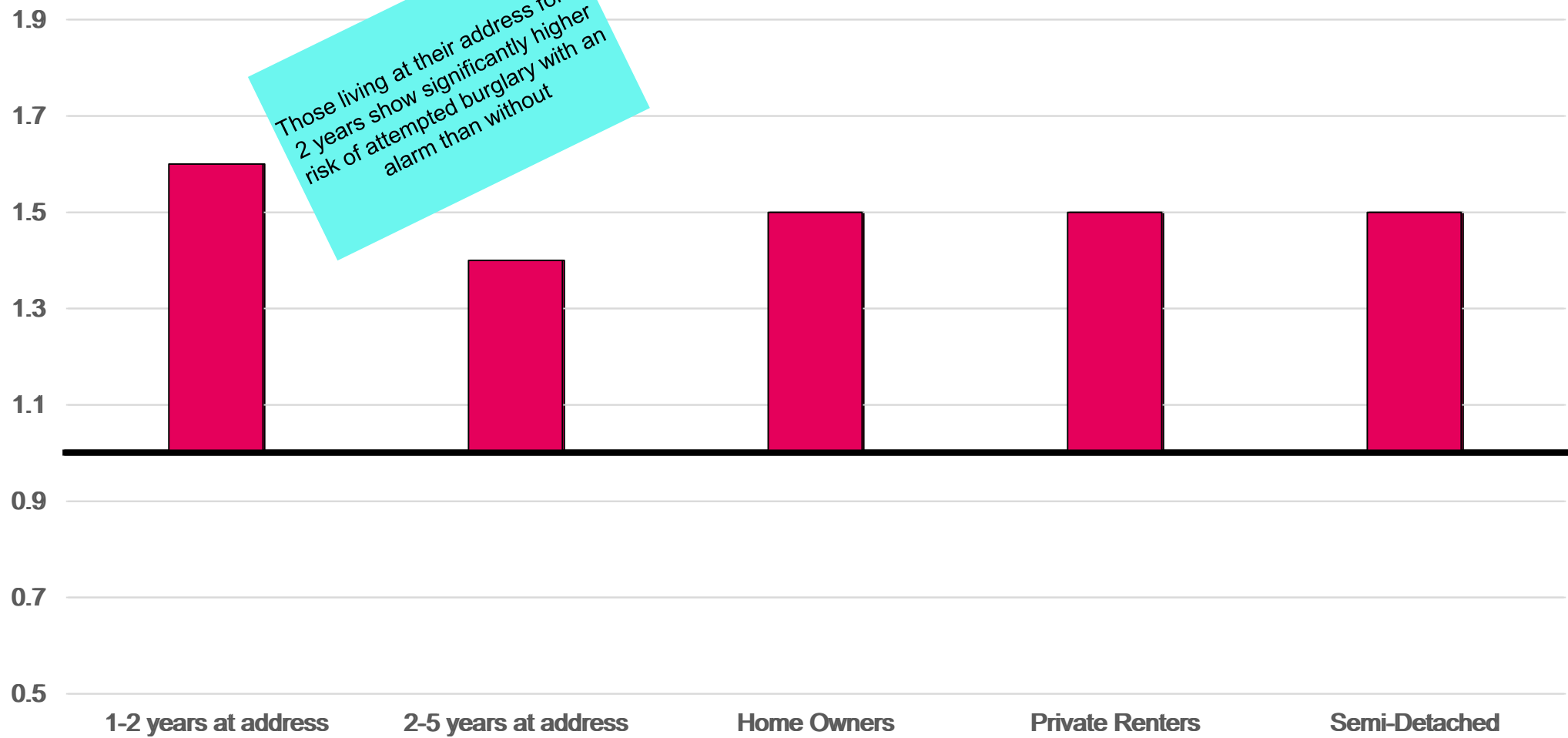
Both Owners and private renters show a higher risk of burglary with a visible alarm than without

Category 8, 9 and 10 of IMD income deprivation have a significantly higher risk of burglary with an alarm than without

■ P < 0.05  
 ■ 0.1 > P > 0.05

# Odds Ratio – Attempted Burglary victimisation risk WITH a visible burglar alarm compared to without one across individual characteristics and wider household composition

Odds ratio of Higher or lower risk of attempted burglary victimisation WITH an alarm than without



Those living at their address for 1-2 years show significantly higher risk of attempted burglary with an alarm than without

# Limitations

Do not tell us if the burglar alarm was installed at the time of the first experience of burglary victimisation or as a consequence of the burglary  
(Unlike the rest of the Tseloni et al 2021 research)

Preliminary indication of burglar alarm effectiveness across population groups

Does not show true risk across population types as burglar alarm might have been installed AFTER victimisation

# Moving Forward...

Data analysis to show when burglar alarm was installed (before or after victimisation)



Merge Victim and Non-Victim forms across sweeps 2014-2020



Analyse all security combinations that include a burglar alarm individually

Qualitative Aspect:  
Interviews in St Anne's  
On impact of area  
refurbishment

Which population groups have an increased or decreased risk of burglary or attempted burglary – or not?



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# Thank you

Questions?

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