

## *Neighbourhood Effects on Child Outcomes*

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# Introduction

- Increasing recognition that the socio-economic status (SES) of the neighbourhood within which children live can have an impact on child outcomes
- Neighbourhoods can impact child outcomes through both structural and compositional characteristics
- Structural – material infrastructure, availability and access to resources and services
- Compositional – characteristics of residents and collective social functioning



# International Research

- Leventhal & Brooks-Gunn (2000) – living in a high-SES neighbourhood has positive effect on school readiness and school achievement
- Xue et al (2005) – children in low-SES neighbourhoods more likely to have mental health problems
- Grow et al (2010) - obesity most common in children living in low-SES neighbourhoods



# GUI data

- Potential to examine neighbourhood effects in the Irish context
- Large, nationally representative sample
- Parent and 9-year-old child's views of the neighbourhood in which they live
- Possible to link GUI data to external datasets – Small Area Population Statistics
- Multiple measures of family SES
- Numerous child outcomes



# Parent's view of neighbourhood

- Physical condition of the neighbourhood
  - *Rubbish & litter lying about* – 34%
  - *People being drunk or taking drugs in public* – 15%
  - *Vandalism and deliberate damage to property* – 15%
  - *Homes & gardens in bad condition* – 10%
- Safety of the neighbourhood
  - *Safe for children to play outside during the day* – 91%
  - *Safe to walk alone after dark* – 68%
  - *Safe parks, playgrounds and play spaces* – 58%



# Parent's view of neighbourhood

- Service availability
  - Schools – 97%
  - Grocery shopping – 94%
  - GP or health clinic – 89%
  - Banking / credit union – 82%
  - Library – 77%
  - Public transport – 66%
  - Social welfare office – 63%
  - Recreational facilities – 57%
- Involvement in community
  - Voluntary groups – 35%
  - Family in area – 62%
- All vary according to individual household SES



# Child's view of the neighbourhood

- Physical condition of the neighbourhood
  - *Too much traffic* – 22%
  - *Streets are dirty* – 22%
  - *A lot of graffiti* – 22%
- Safety of the neighbourhood
  - *Feel safe living around here* – 95%
  - *Places for children to play safely near your house* – 77%

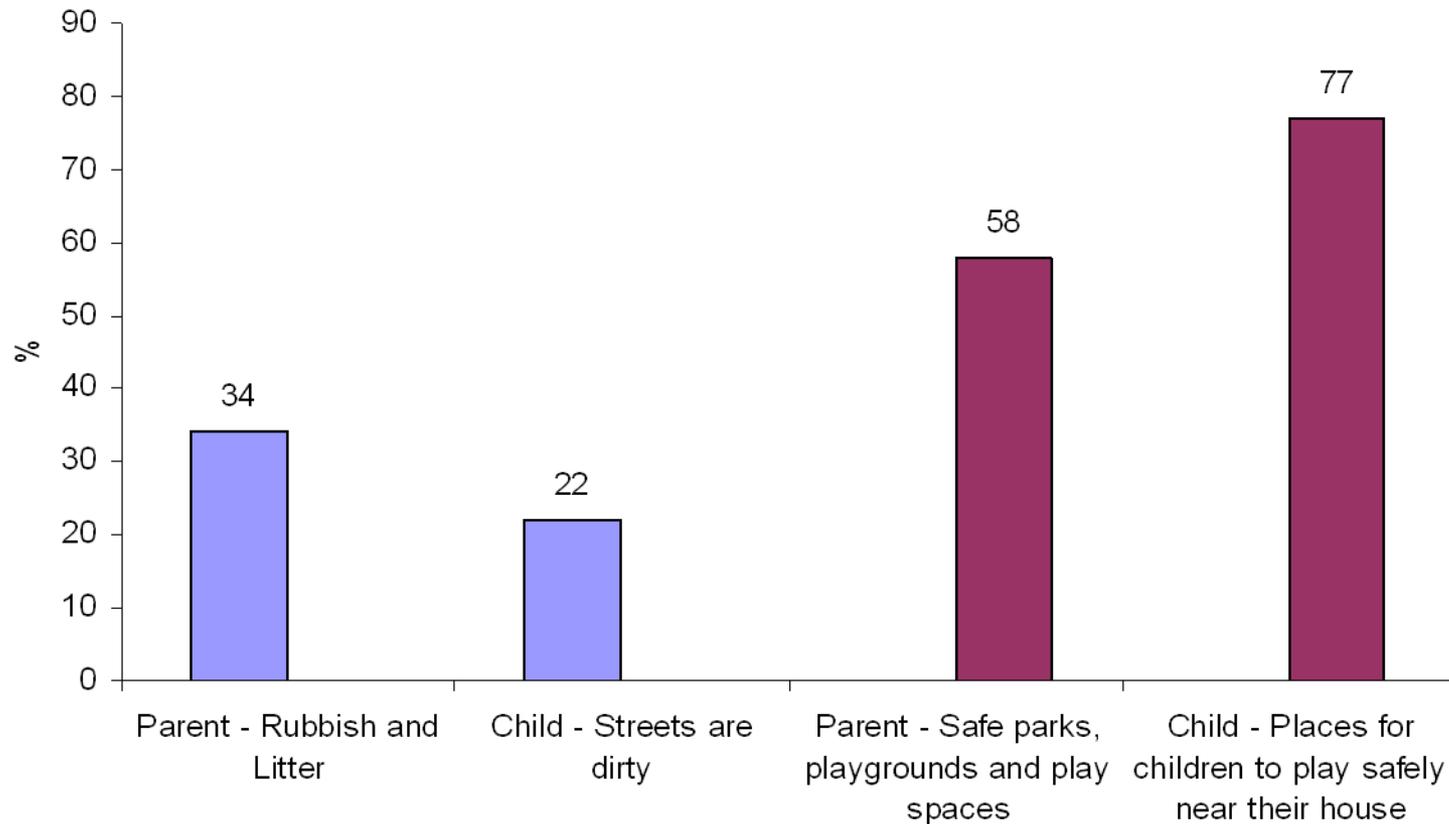


# Child's view of the neighbourhood

- Service availability
  - Good places to play – 83%
  - A green area to play – 82%
  - Activities to do after school – 76%
  - Public transport to school – 56%
  - A playground – 46%
  - Youth clubs – 43%
- All vary according to individual household SES

# Parent vs Child view

Parent vs Child view of neighbourhood





# Data Linkage - SAPS

- Area identifier recorded for each family
- Electoral Divisions (ED) – 3,440 in Ireland, 1,810 in GUI data
- Small Area Population Statistics (SAPS) from CSO Census 2006
- Information on marital status, ethnicity, housing, occupations, car ownership etc

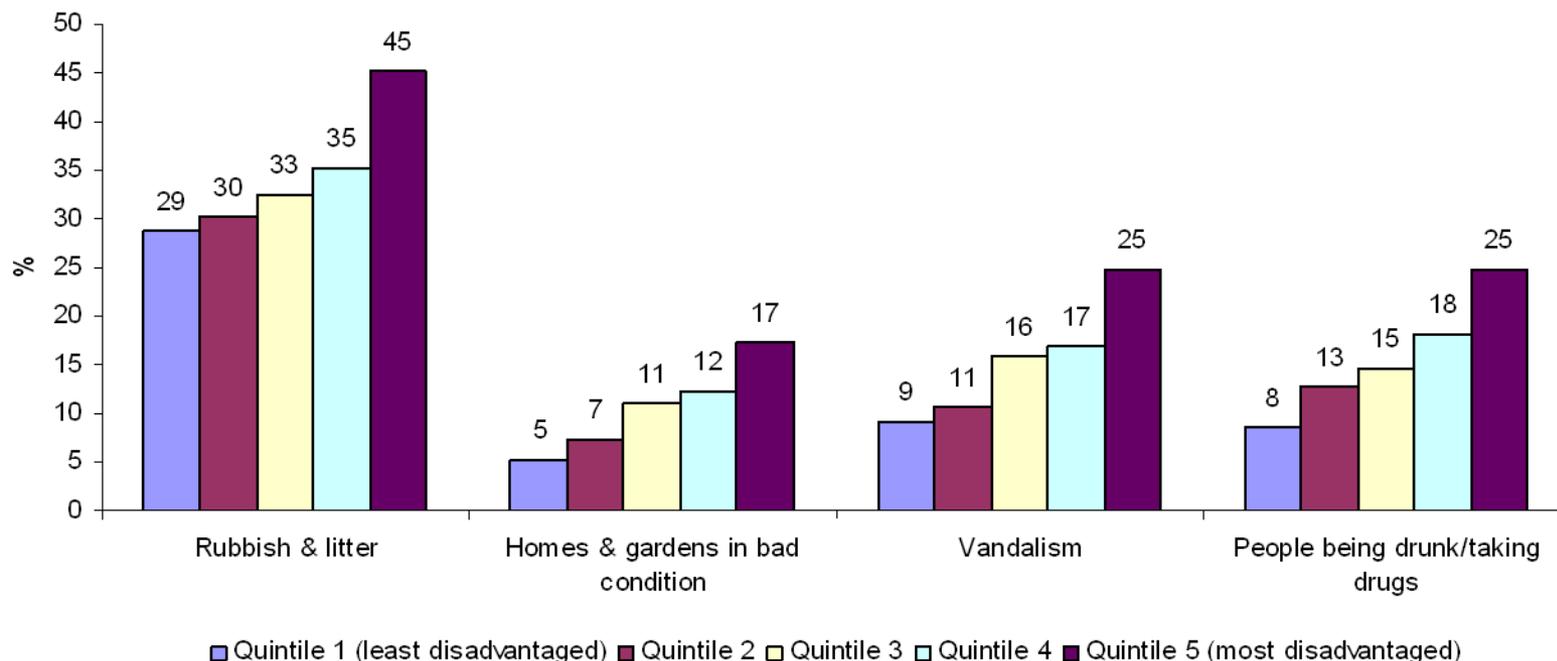


# Neighbourhood SES

- Objective measure of neighbourhood SES
- Neighbourhood SES – combination of:
  - % unemployed,
  - % low education,
  - % unskilled social class
- Each ranked from lowest % to highest %, average rank
- Grouped into quintiles from least disadvantaged to most disadvantaged areas

# Physical condition by neighbourhood SES

Parent's perception of physical condition of neighbourhood (fairly or very common) by neighbourhood SES



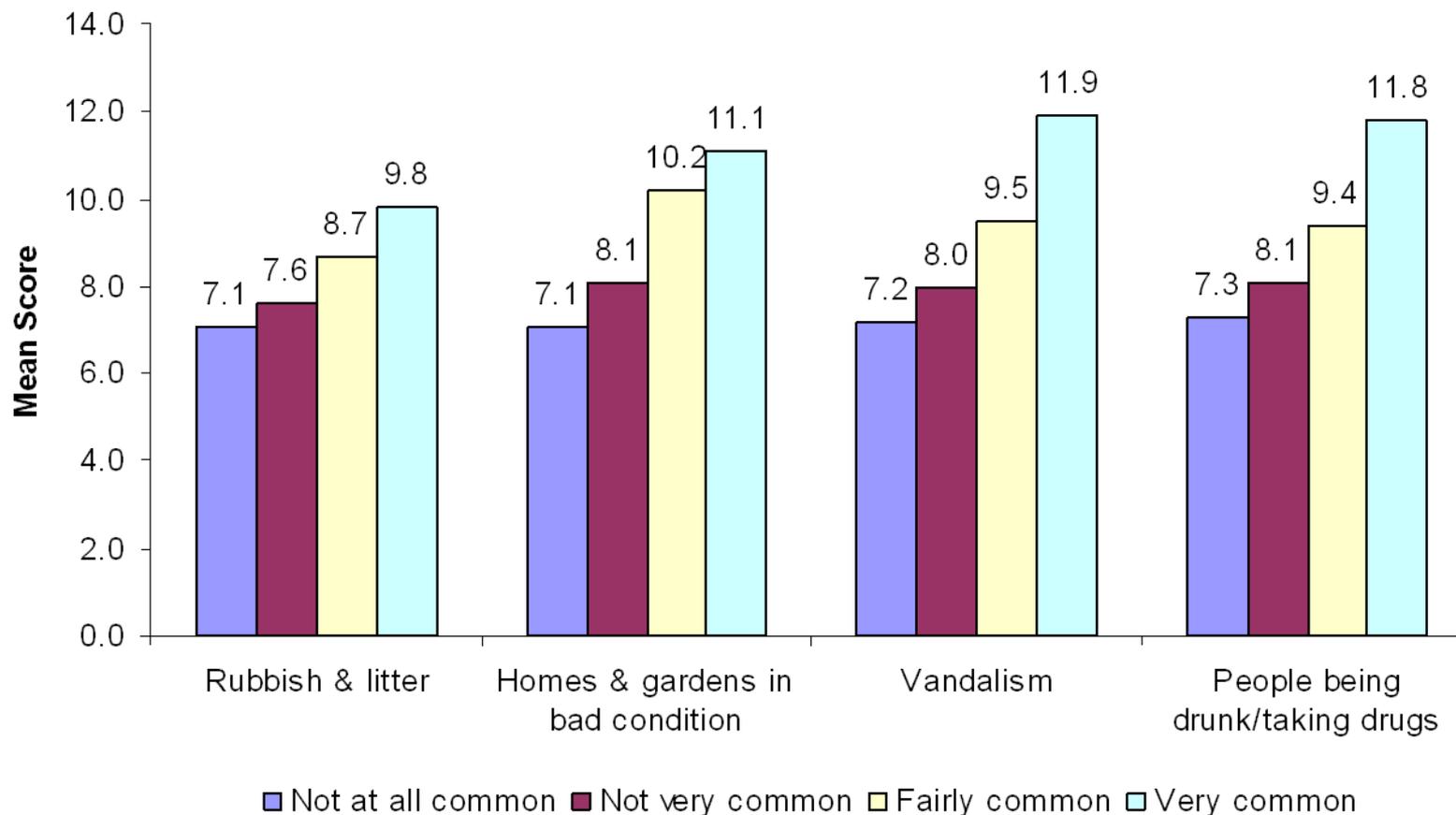


# Impact on Child Outcomes

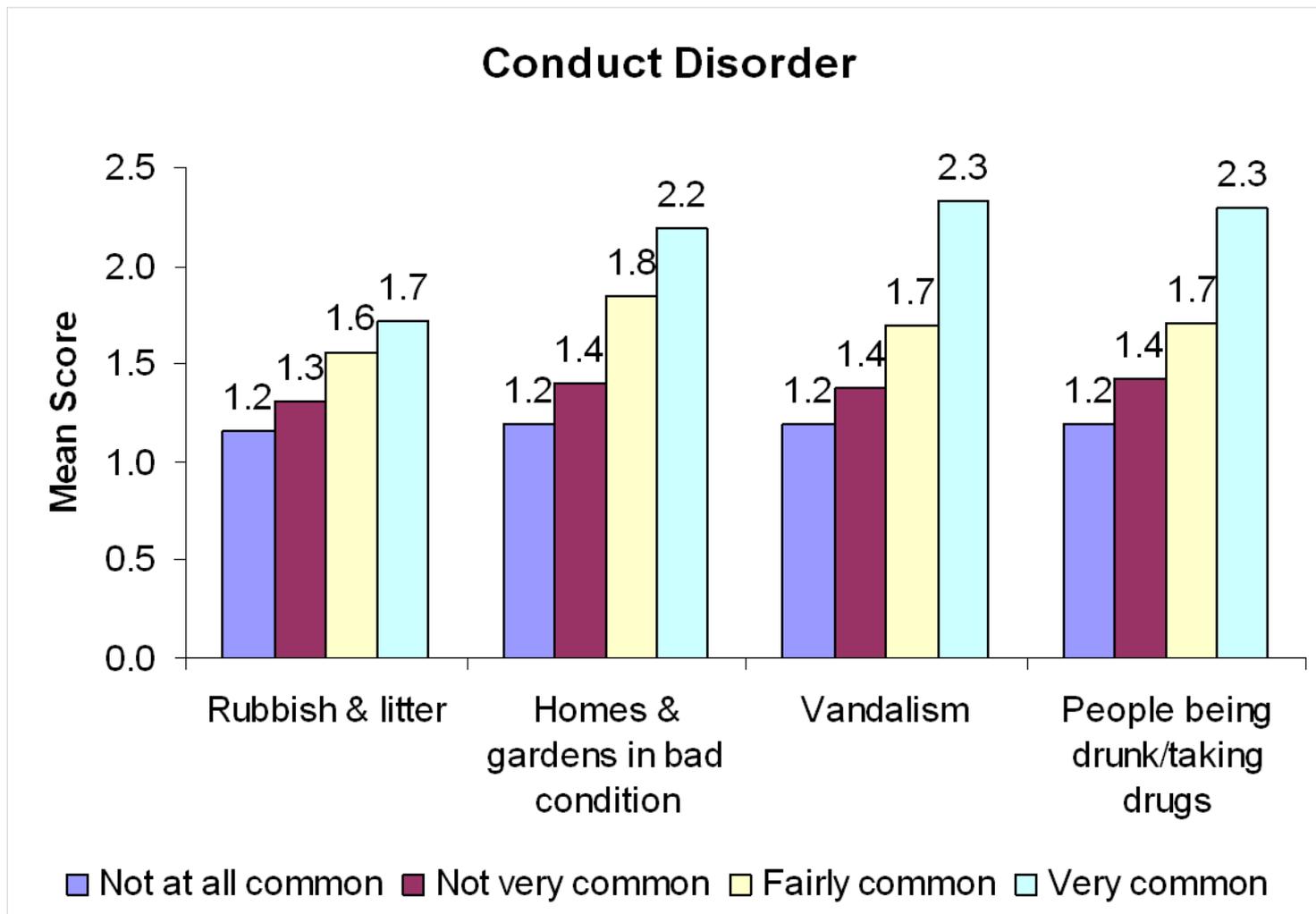
- Strengths and Difficulties Questionnaire (SDQ)
- Parent report
- Total difficulties score – 0 to 40
- Conduct disorder subscale score – 0 to 10
- Higher score indicates more difficulties
- Mean score

# SDQ by neighbourhood perception

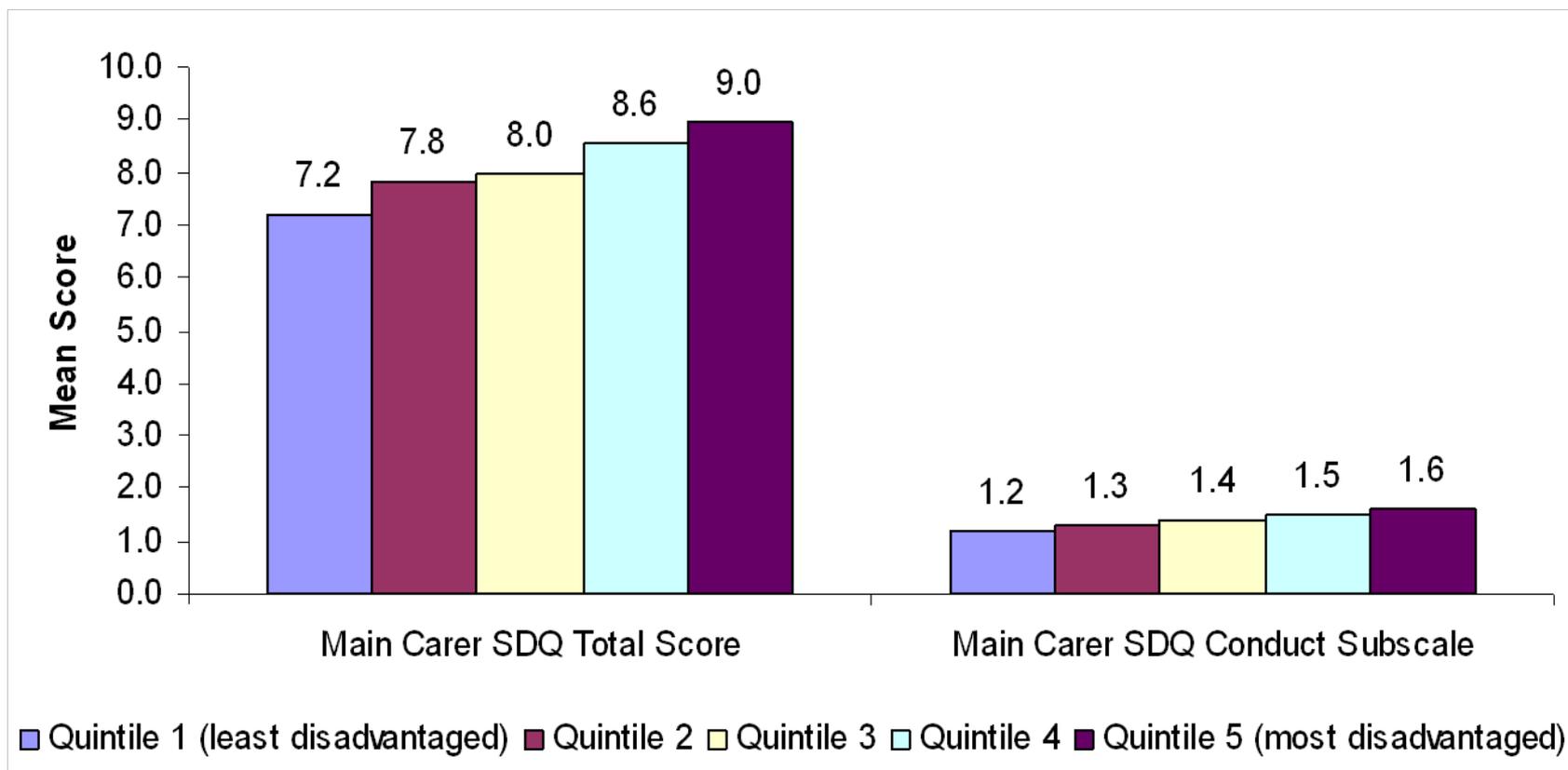
**Total Difficulties**



# SDQ by neighbourhood perception



# SDQ scores by neighbourhood SES





# Other factors

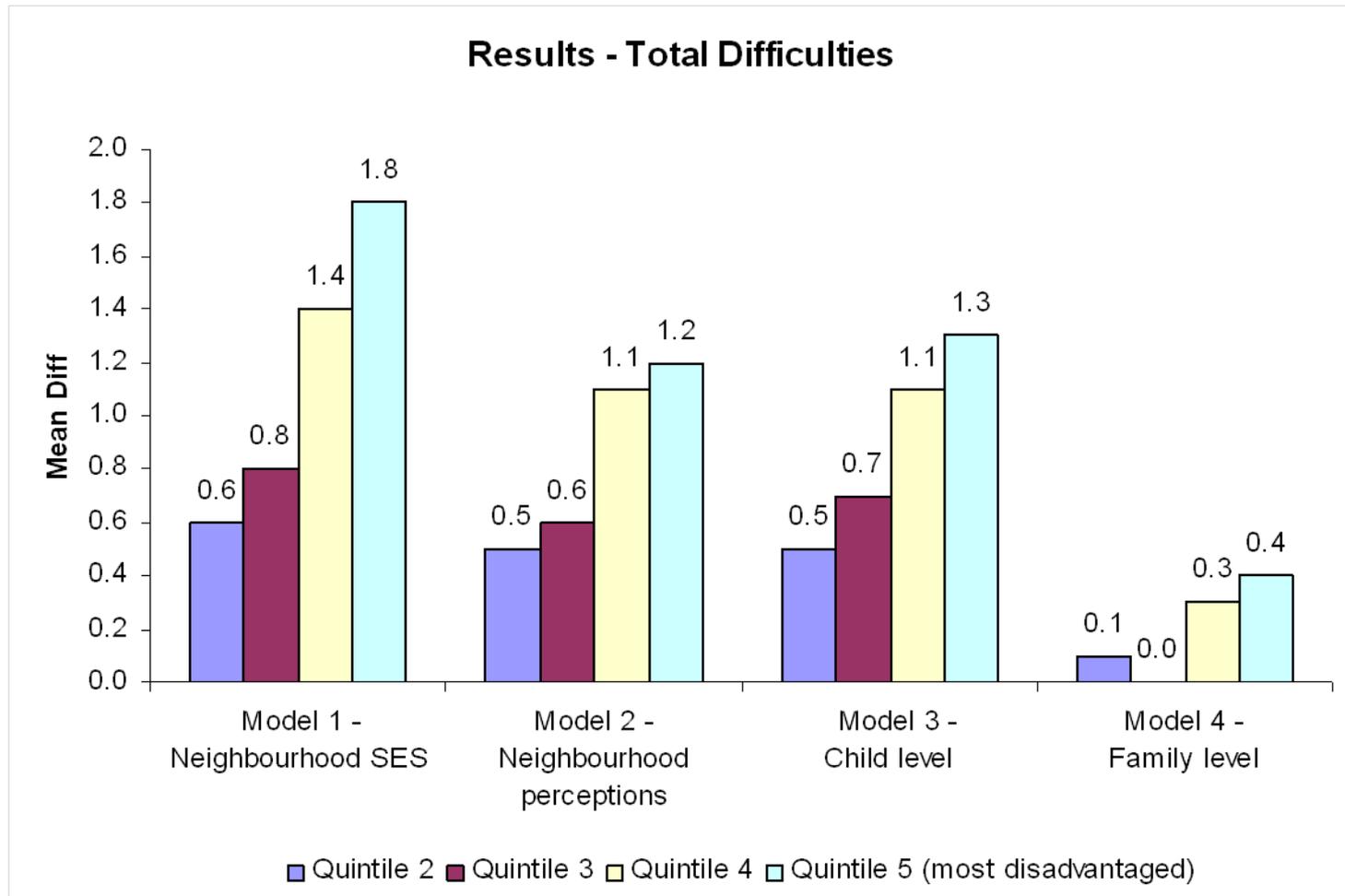
- Can this relationship with neighbourhood SES be accounted for by other variables?
- Regression analysis carried out – 4 blocks of variables:
  - Neighbourhood disadvantage
  - Parent perception of neighbourhood
  - Child level
  - Family level



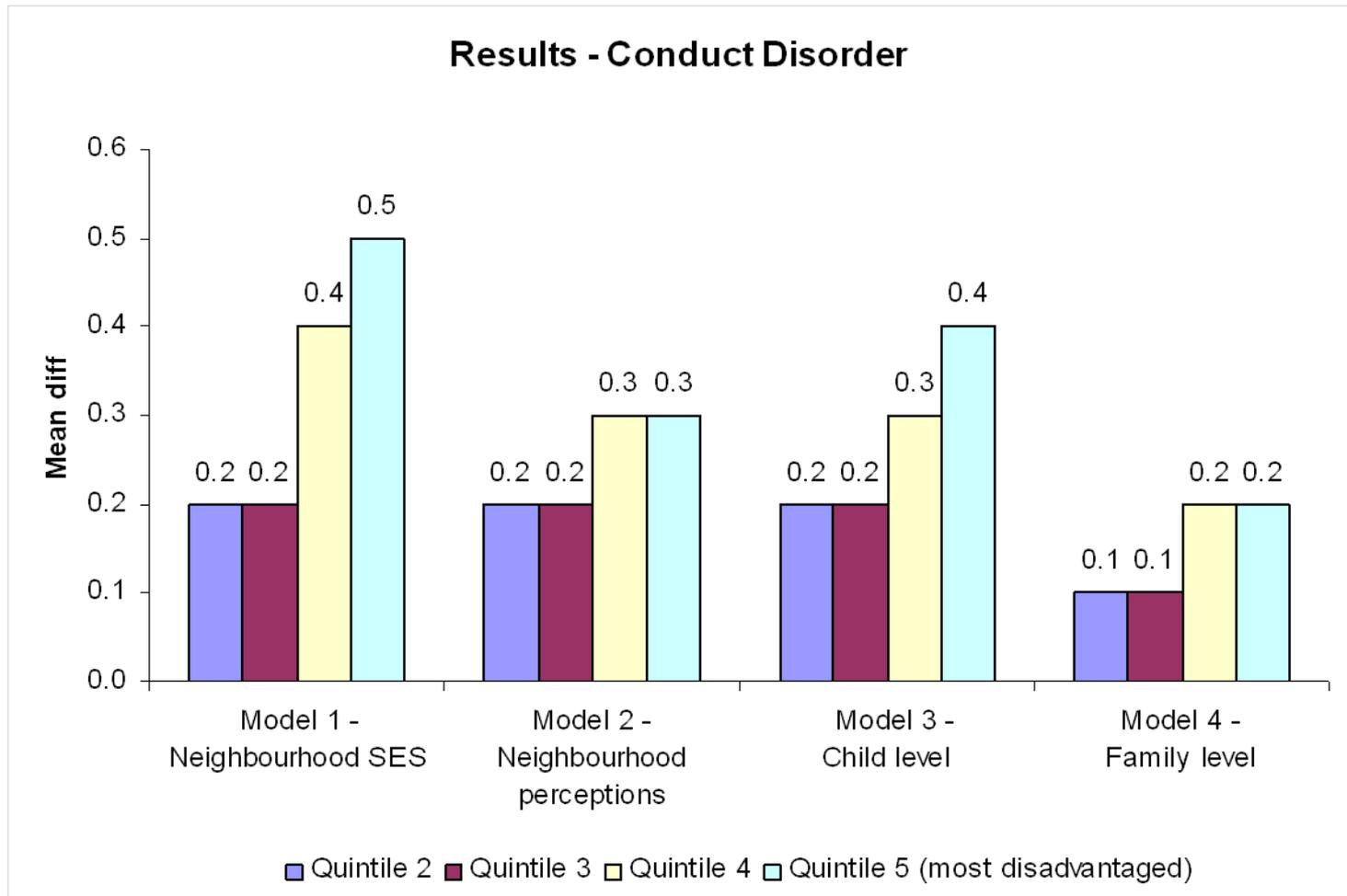
# Other factors

- Child level
  - Gender
  - Low birthweight
  - Prematurity
- Family level
  - Mother's age
  - Family social class
  - Family income
  - Parental education
  - Lone parent
  - Region

# Neighbourhood effect: difference from least disadvantaged areas



# Neighbourhood effect: difference from least disadvantaged areas





# Conclusion

- Preliminary analysis shows some evidence that children living in more disadvantaged neighbourhoods score higher on SDQ
- More sophisticated measure of area disadvantage – taking into account more SAPS data
- Multi-level modelling to take account for hierarchical nature of the data – children are grouped within neighbourhoods
- GUI dataset provides ideal opportunity to examine the effect of neighbourhood on a range of child outcomes in the Irish context