

# Neighbourhood social capital and common mental disorder

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# Background

- CMD (e.g. depression, anxiety) is major cause of disability, sickness absence and GP workload
- Geographical differences in prevalence of CMD
- Higher prevalence in North vs South of England (Lewis & Booth, 1992)
- Lower prevalence in rural areas (Weich et al, 2006)
- What is it about certain places that influences mental health?

# ■ Here focus on social capital

Civic  
mindedness

Community

**Putnam (1993) defined  
social capital as**

**“Features of social  
organisations that  
facilitate action and  
co-operation”**

Social glue

Reciprocity

Trust

Citizenship

Social  
cohesion

Civil society

Civic  
engagement

- People belong to group
- Group can provide mutual benefits (and downsides)
- Norms govern way group operates
  - norms of reciprocity
  - sanctions
  - endorsements
- Norms = type of informal social control to allow group to govern itself

- **Structural** social capital (forms of social networks)
- **Cognitive** social capital (quality of social interactions within the network)
- **Bonding** social capital (exclusive, with people similar to self)
- **Bridging** social capital (more inclusive, across types of people)
- **Individual** social capital
- **Ecological** social capital

- Two recent reviews of social capital and mental health
- De Silva et al, 2005 and Almedom, 2005
- Found only 7 studies with ecological social capital
- Concluded insufficient evidence to establish relationship
- Limited measures of social capital
- Only considered main effects

- Buffering model: social capital most important in the presence of a stressor
- Hypotheses
  - 1: Neighbourhood social capital associated with CMD (main effect)
  - 2: Neighbourhood social capital most strongly associated with CMD in deprived areas or deprived households (buffering effect)

# Data

- HSE (1994-1999 excl '96) & SHS (1995, 1998)
- + Community social capital survey (2000)
  
- Not enough resources to measure social capital in all HSE/SHS areas
- So took stratified random sample of eligible postcode sectors from HSE/SHS
- Within each postcode sector, participants randomly sampled from electoral register
- Social capital survey ppts not same as HSE/SHS ppts (unless by chance)

- Community social capital survey
- Postal questionnaire
- “Neighbourhood” = postcode sector
- Average 48 respondents per neighbourhood (ranging from 17-115)
- Response rate 42%

**Structural:  
forms of social  
networks**

- family ties
- friendship ties
- integration into wider community
- associational membership



**Cognitive:  
quality of social  
relations**

- generalised trust
- sense of attachment
- reciprocity
- tolerance/respect

# Sense of attachment

I really feel part of this area

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I feel that I don't belong in this area

Most people in this area are friendly

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Most people in this area are unfriendly

People in this area have a lot of community spirit

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People in this area have no community spirit

People in this area do things to help the community

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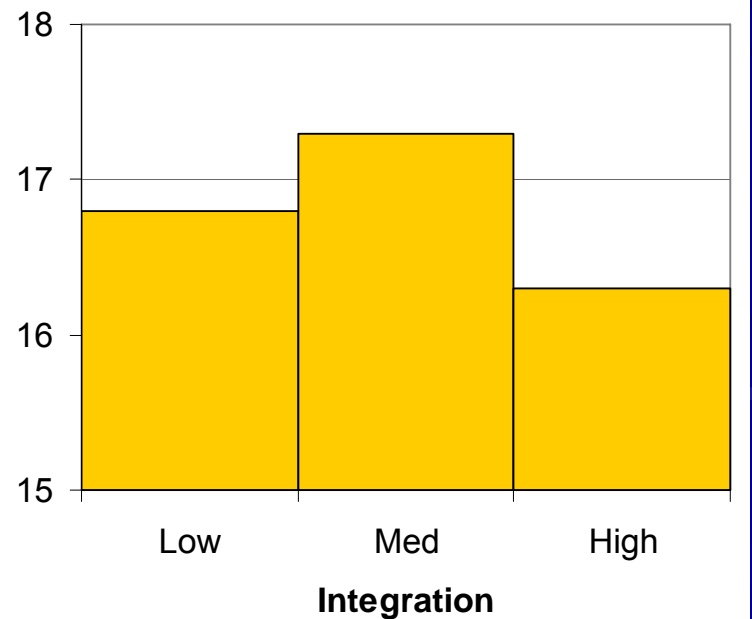
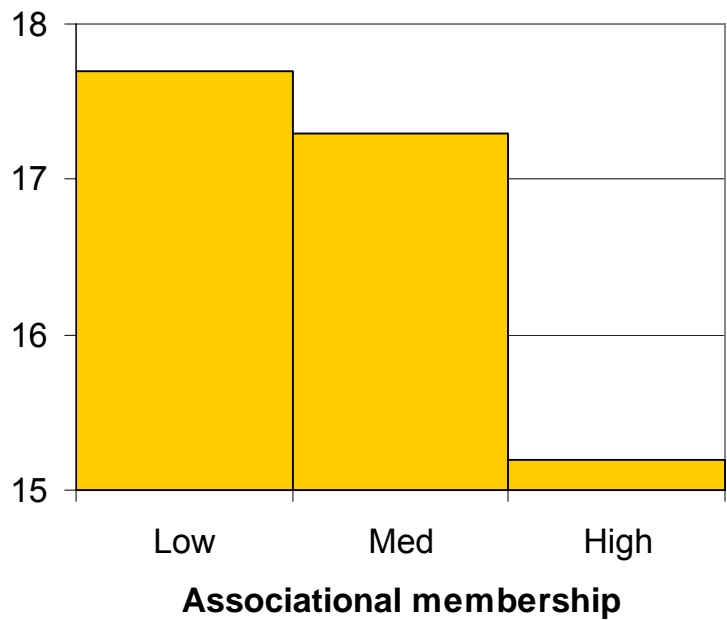
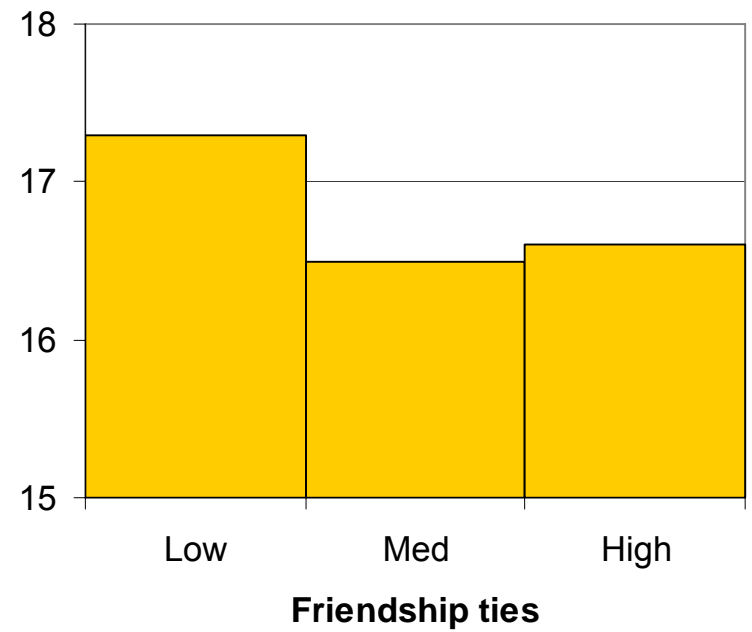
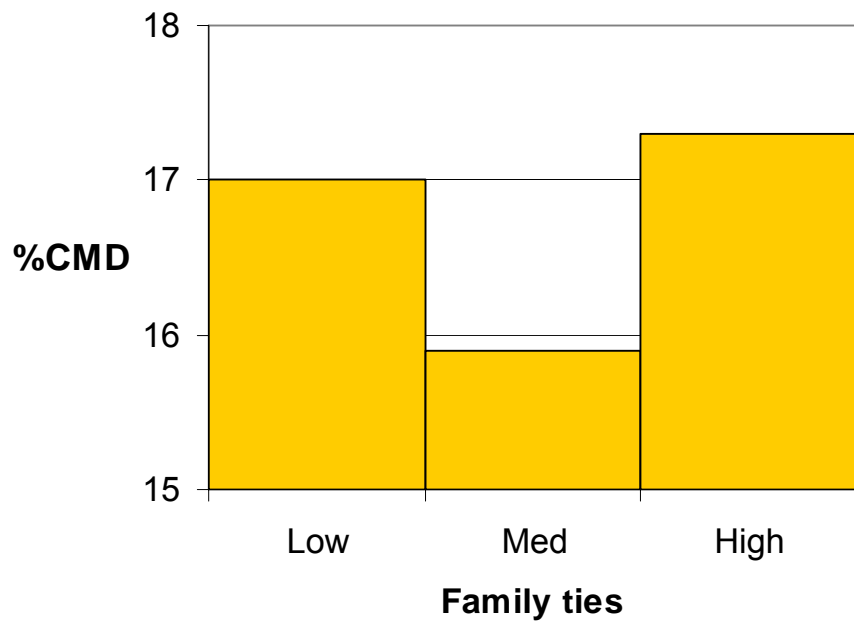
People in this area only look out for themselves

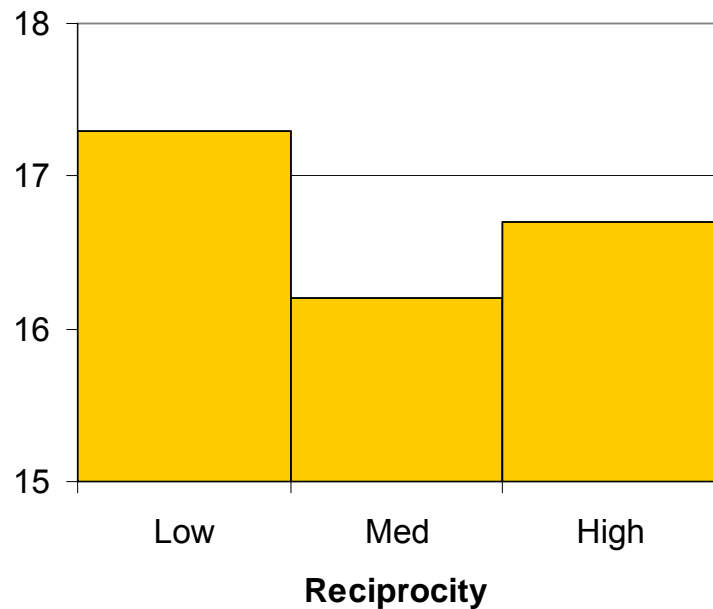
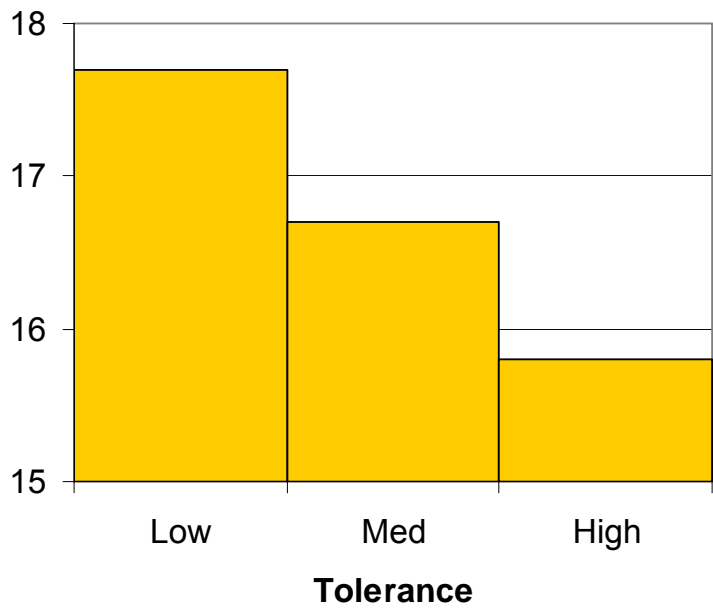
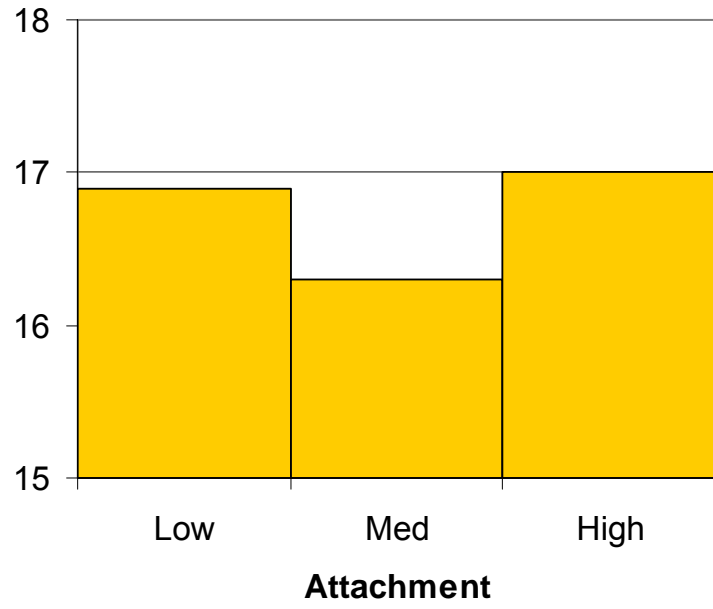
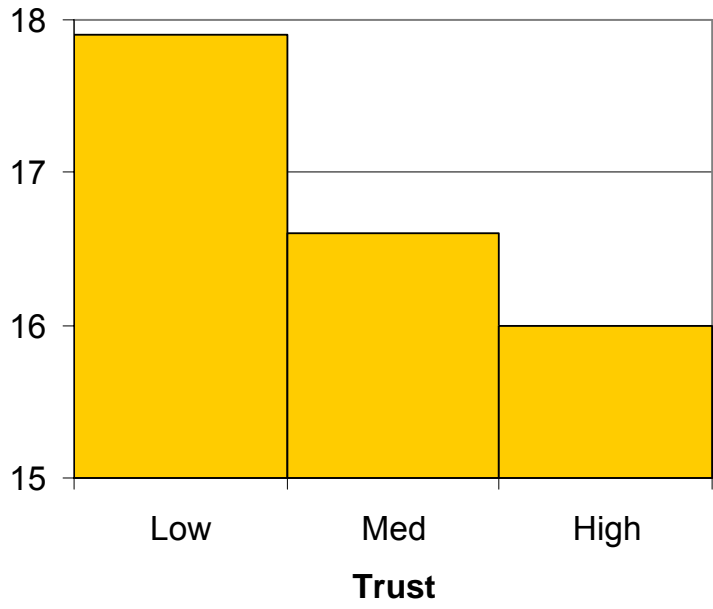
# Analysis

- Probable CMD case = GHQ12 score  $\geq 3$
- Complete data on 9,082 HSE/SHS participants in 239 neighbourhoods
- Average of 36 in each neighbourhood (ranging from 1-121)
- Multilevel modelling using MLwiN
- Logistic regression to model odds ratio of CMD
- Adjusted for age, gender, social class
- All 8 social capital scales included together

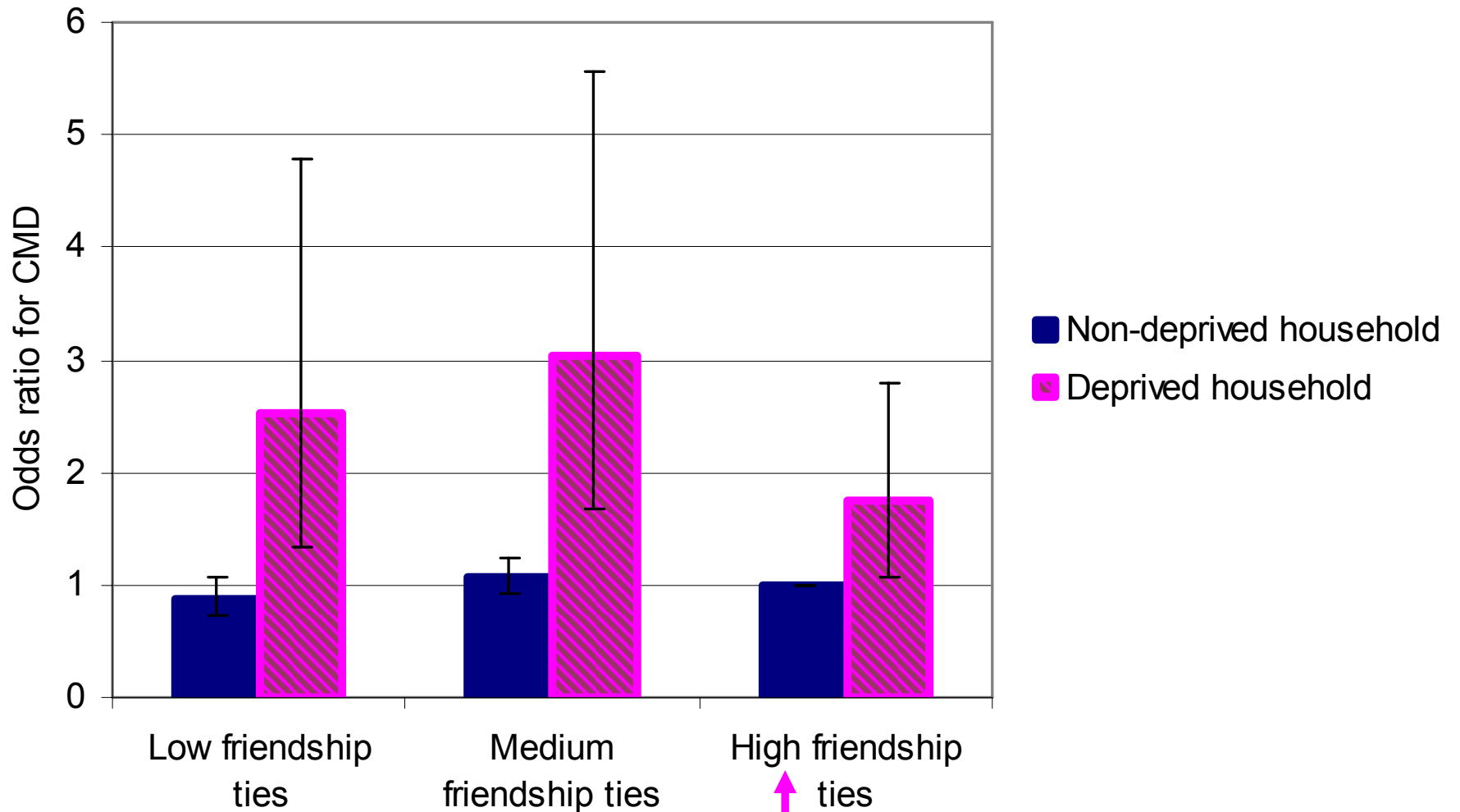
	n (%)	% probable CMD
<i>Male</i>	4040 (45)	13.8
<i>Female</i>	5042 (55)	19.1
<i>16-29 years</i>	2020 (22)	16.2
<i>30-44 years</i>	2915 (32)	17.1
<i>45-59 years</i>	2187 (24)	18.8
<i>≥ 60 years</i>	1980 (21)	14.6
<i>Social class I</i>	367 (4)	11.2
<i>II</i>	2075 (23)	15.1
<i>IIINM</i>	2187 (24)	17.3
<i>IIIM</i>	1734 (19)	15.5
<i>IV</i>	1502 (17)	17.9
<i>V</i>	613 (7)	22.5
<i>Missing</i>	604 (7)	18.9
<i>Living in deprived household</i>	3744 (41)	21.1
<i>Not</i>	3555 (39)	12.4
<i>Carstairs index of deprivation</i>		
<i>&lt; -2.00 (least deprived)</i>	2365 (26)	13.6
<i>-2.00 to 0.00</i>	1928 (21)	16.3
<i>0.00 to 1.99</i>	2066 (23)	17.9
<i>≥ 2.00 (most deprived)</i>	2723 (30)	19.0

# Testing main effect

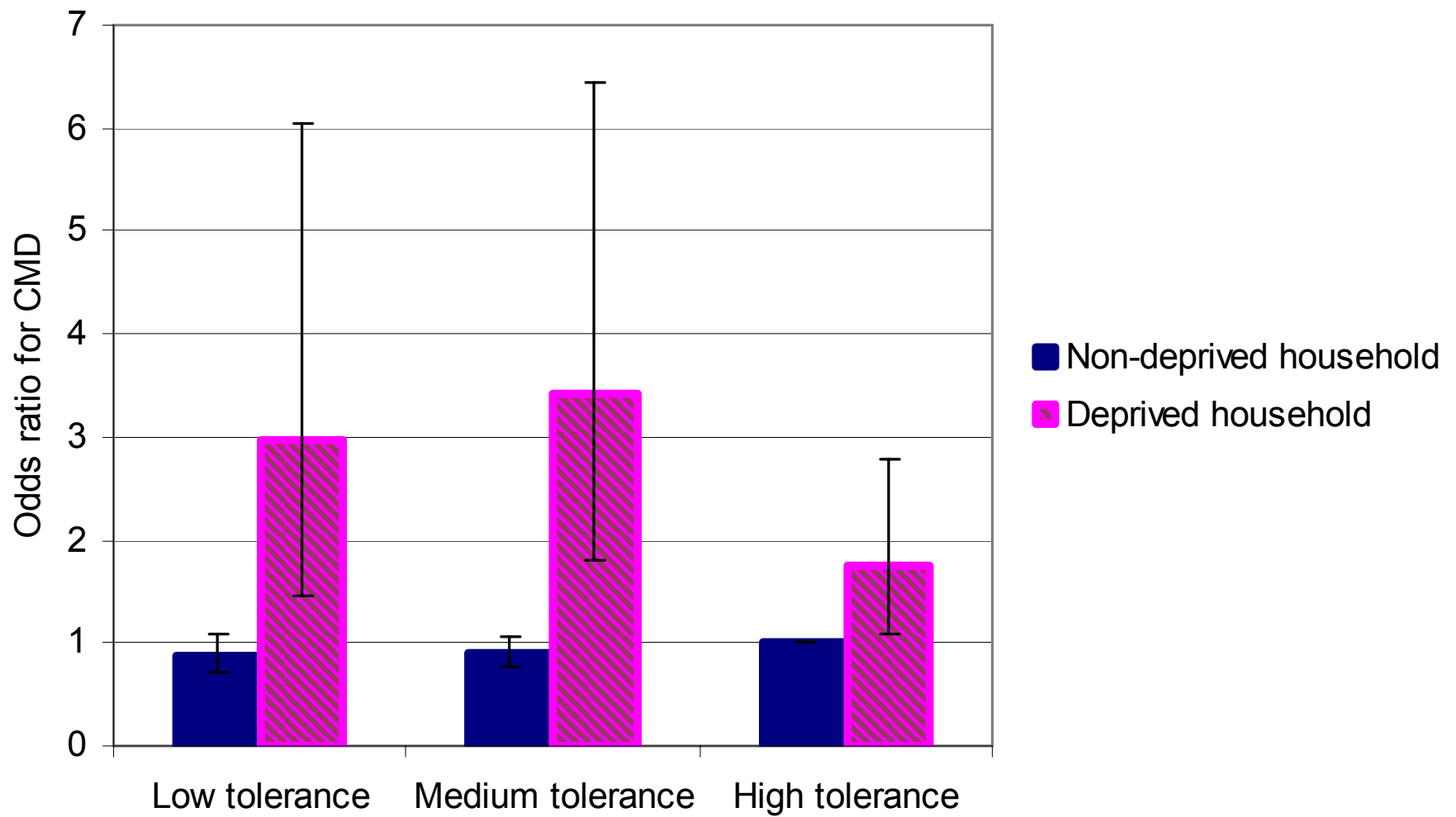


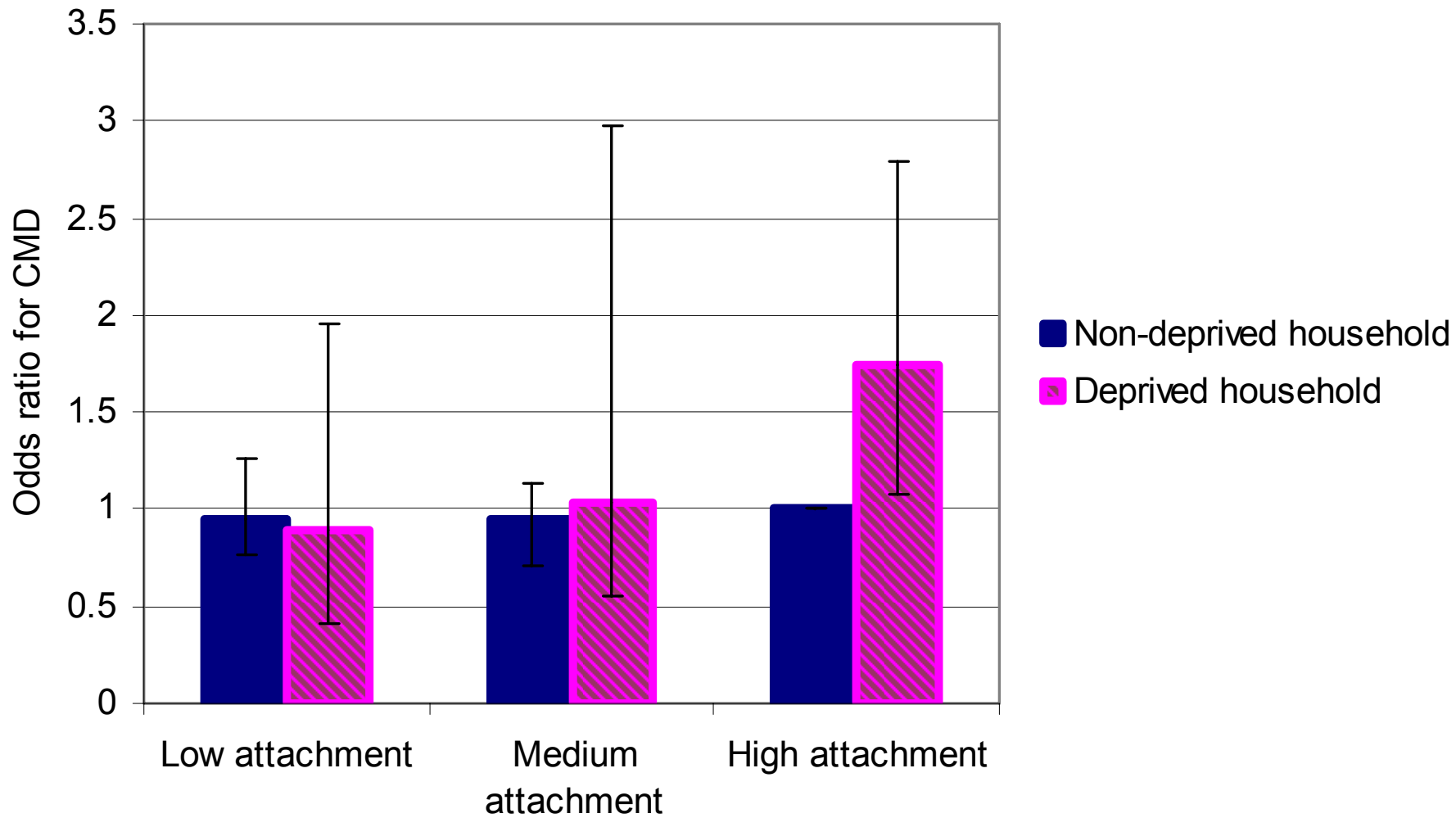


Testing buffering effect  
(interaction between social capital  
and deprivation)



reference group





Same findings for neighbourhood deprivation (data not shown)

# Conclusions

- No evidence of main effect of neighbourhood social capital
- But evidence for an association in deprived groups
- Social capital may provide a buffer against some of the effects of deprivation
- Or those with fewer personal resources may be more exposed to their neighbourhood

## ■ In deprived circumstances only

- some aspects of social capital protective, namely friendship ties and tolerance
- some aspects of social capital have adverse effect, namely sense of attachment
- further analysis showed high attachment areas have high levels of contact with people in same area and low levels of contact with people outside area

- The HSE and SHS provided invaluable source of health data
- Combining years can add power/precision
- Value added by linking these surveys to other data (e.g. Neighbourhood statistics, death register)