

Socioeconomic status, alcohol use and the role of social support and neighbourhood disadvantage among people with a mental health problem

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Alcohol and mental health

- The prevalence of hazardous and harmful drinking is more common among people who have a mental health problem (Grant et al., 2015; Lai et al., 2015; Puddephatt et al., 2021)
- However, individuals with a mental health problem may also be more likely to not drink alcohol (Skogen et al., 2011; Puddephatt et al., 2021)
- The reasons for the different patterns of drinking among people with a mental health problem is not well understood

Explanations for the association between alcohol and mental health

- Others might not drink alcohol to manage their mental health – otherwise known as the sick-quitter hypothesis (Skogen et al., 2009)
- Alcohol harms and poorer mental health might be more likely among people from lower socioeconomic status (SES)
- Research has shown associations between SES and alcohol use which were attenuated by having a common mental health problem among the lowest SES group (Boniface et al., 2020)
- We found only partial attenuations between in the association between alcohol and mental health after adjusting for SES (Puddephatt et al., 2021)
 - Other mechanisms?

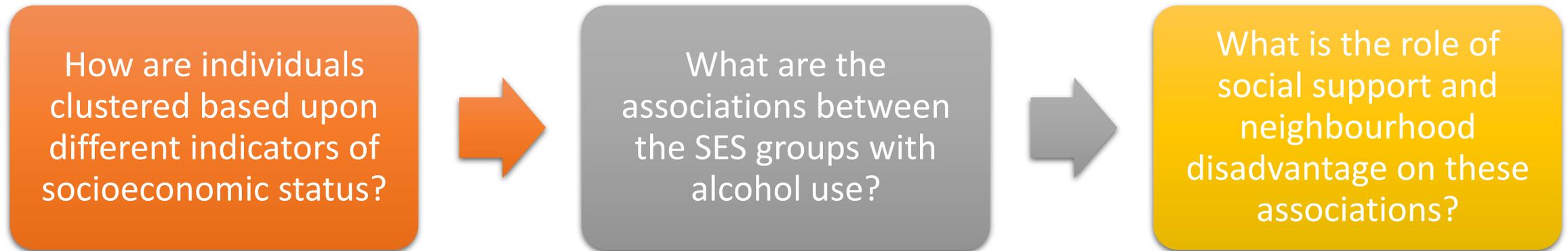


Social support and neighbourhood disadvantage

- Social support and neighbourhood disadvantage may act as protective or reinforcing factors of both poor mental health and alcohol use
- Social support may act as a buffer against stress and subsequently reduce the likelihood of using maladaptive behaviours (Cohen et al., 2004)
- Neighbourhood disadvantage may be a risk factor of co-occurring alcohol and mental health problems because individuals living in deprived areas may experience more stress (Eaton et al., 1999)



Aims



*These aims are focused on participants who meet criteria for a mental health problem

Method

- 2014 Adult Psychiatric Morbidity Survey
- Restricted to those meeting criteria for a mental health problem ($N=1,463$)

Alcohol use

- Alcohol Use Disorder Identification Test (AUDIT)
- Non-drinker (AUDIT score of 0 or reported “never drank alcohol”)
- Low-risk drinker (AUDIT score of 1-7)
- Hazardous drinker (AUDIT score of 8-15)
- Harmful/probable dependent drinker (AUDIT score of 16 or higher)

Mental health

- Participants who met criteria for **any** mental health problem
- Includes depression, anxiety, post-traumatic stress disorder, bipolar disorder, probable psychosis, personality disorder

Socioeconomic status

- Highest educational qualifications
- Housing tenure
- Household type
- Social occupational grade
- Being in debt
- Being in receipt of any out of work benefits

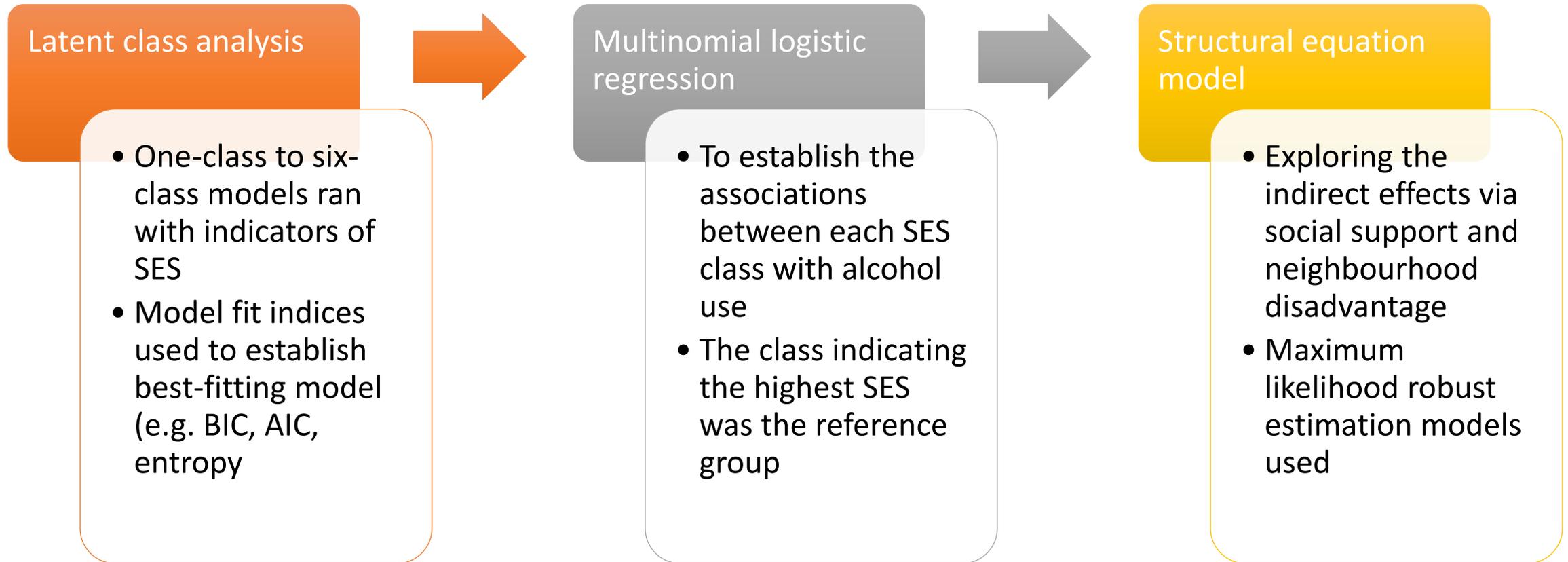
Social support

- 1987 Health and Lifestyle Survey
- Maximum score of 21 (indicating good social support)
- Treated as a continuous variable

Neighbourhood disadvantage

- Assesses social cohesion and neighbourhood quality
- Maximum score of 45 (indicating high levels of neighbourhood disadvantage)
- Treated as a continuous variable

Analysis



*All data was weighted to account for selection probabilities and non-response

**The analysis plan was pre-registered on Open Science Framework (<https://osf.io/h3ntf/>)

How are individuals with a mental health problem grouped based on SES indicators?

Fit indices	One-class model	Two-class model	Three-class model	Four-class model	Five-class model	Six-class model
Model replicated	NA	Yes	Yes	Yes	Yes	No
Loglikelihood	-8940.511	-8433.465	-8241.634	-8103.776	-8035.702	-8004.882
No of parameters	15	31	47	63	79	95
LMR-LRT	NA	1004.250	380.401	273.371	134.99	61.117
p	NA	0.001	0.612	0.768	0.785	0.773
AIC	17911.022	16928.930	16577.267	16333.552	16229.405	16199.764
BIC	17990.346	17092.866	16825.815	16666.711	16647.176	16702.147
SSABIC	17942.695	16994.389	16676.511	16466.580	16396.218	16400.362
Entropy	NA	0.772	0.888	0.813	0.772	0.764

What the characteristics of SES groups?

“Professional occupation, homeowners”

83% in managerial/professional occupations
1% were in receipt of out of work benefits
71% educated to degree level
68% were homeowners

“Retired homeowners”

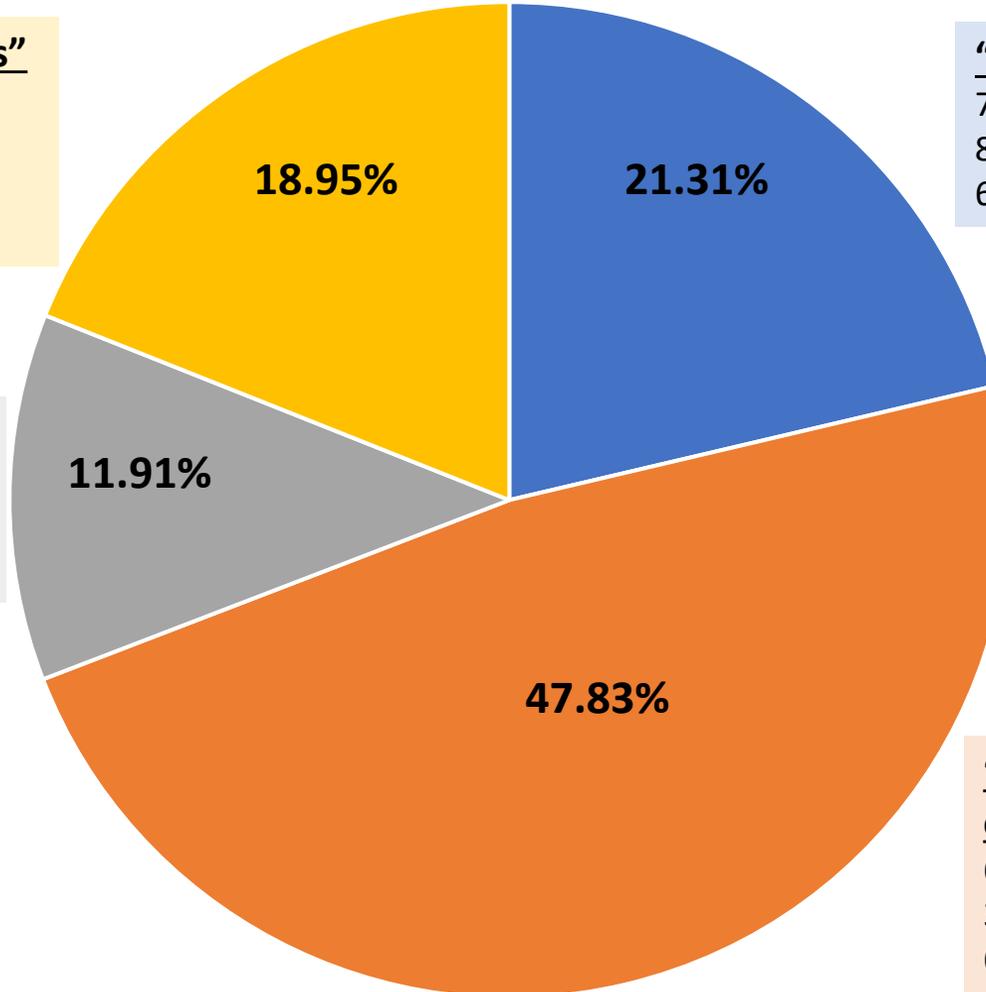
90% were retired
2% were in receipt of out of work benefits
71% were homeowners

“Economically inactive, social renters”

79% were not working/not worked in the past year
85% were in receipt of out of work benefits
64% were social renters

“Routine/intermediate occupation, mixed owner/renters”

67% in routine/intermediate occupations
3% were in receipt of out of work benefits
69% educated to A-Level or GCSE level



What are the associations between SES groups and alcohol use within people with a mental health problem?

Non-drinking

- Compared to “professional occupation, homeowners” all other SES groups were at least **twice as likely** to be non-drinkers
- Odds strongest among “economically inactive, social renters” (OR=4.98 (95% CI=3.03-8.91))

Hazardous drinking

- Compared to “professional occupation, homeowners”, “retired homeowners” were significantly **less likely** to be hazardous drinkers (OR=0.48, 95% CI=0.27-0.85)

Harmful/probable dependent drinking

- No significant associations between SES classes and harmful/probable dependence were found

What is the indirect effect via social support on the association between SES groups and alcohol use?

- Compared to “professional occupation, homeowners”, all other SES classes reported significantly **lower** social support scores
- There were indirect effects via social support for the following paths:

“economically inactive, social renters” > social support > non-drinking (unstandardized coefficient=0.20, p=0.01)

“economically inactive, social renters” > social support > harmful/probable dependent drinking (unstandardized coefficient=0.25, p=0.01)

“retired homeowners” > social support > non-drinking (unstandardized coefficient=0.05, p=0.02)



What is the indirect effect via neighbourhood disadvantage on the association between SES groups and alcohol use?

- Compared to “professional occupation, homeowners”, “**economically inactive, social renters**” reported significantly **higher** neighbourhood disadvantage scores
 - “**Retired homeowners**” reported significantly **lower** neighbourhood disadvantage scores
- There was a significant indirect effect via neighbourhood disadvantage for the following path:

“economically inactive, social renters” > neighbourhood disadvantage > harmful/probable dependent drinking (unstandardized coefficient=0.13, p=0.02)



Conclusions

- Individuals who meet criteria for a mental health problem present from a range of SES backgrounds
- Compared to higher SES groups, lower SES who met criteria for a mental health problem **were not** more likely to report drinking at hazardous and harmful levels
 - Already higher prevalence of hazardous and above drinking among individuals with a mental health problem and so differences may be less salient in this sample (Grant et al., 2015, Puddephatt et al., 2021)?
 - Different patterns of drinking e.g. binge-drinking (Probst et al., 2020)
- Individuals with a mental health problem who are in non-working occupations, live in social housing and in the most disadvantaged neighbourhoods may be at most risk of drinking at harmful levels

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Any questions?

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