the spatial restriction prohibiting tobacco retail within 50m from school areas.

Methods Tobacco retailers (n=19,413) were extracted from a web-scrapped Points of Interest database in 2019. Using GIS analysis, for all public schools (n=1483) across Shanghai, the distribution of tobacco retailers around the main entrance of public schools were calculated using the number and proportion of tobacco retailers within 5 and 10-min walking road network distances around public schools. The degrees of clustering of tobacco retailers within 5 and 10-min walking distances from public schools were determined using multitype K-function. The non-compliance with spatial restriction was examined using the proportion of public schools with at least one tobacco retailer around. The stratified analysis was also carried out by types of schools, levels of urbanity, and school deprivation, and types of tobacco retailers.

Results Within 10-min walking distance, 95.8% of public schools were exposed to tobacco retail, 59.99% of all tobacco retailers were in the vicinity of a school. Greater proportions of tobacco retailers were found around primary schools (45.9%) and schools in more urbanised areas (97.3%). Significant spatial clustering of tobacco retailers was found around public schools within 5 and 10-min walking distance with higher degrees of clustering around high schools and secondary schools, while the clustering pattern of tobacco retailers around public schools was insignificant in more urbanised areas. 5.87% of public schools were exposed to non-compliant tobacco retailers. A greater proportion of primary schools (6.8%) were found with non-compliant tobacco retailers compared to high schools (3.98%) and secondary schools (2.1%). 12.19% of public schools in more urbanised areas were exposed to non-compliant tobacco retailers. Differences in levels of school deprivation were insignificant. Among types of tobacco retailers around school areas, the convenience store was the most available type.

Conclusion Tobacco retail availability within walking distances from public schools of Shanghai was high, particularly in more urbanised areas. The current spatial restriction on tobacco retail around public school areas is proving insufficient to protect adolescents.

OP72 | THE ROLE OF SOCIOECONOMIC DISPARITIES IN COGNITIVE AGEING: A CROSS-COUNTRY COMPARISON BETWEEN ENGLAND AND CHINA

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Background In the context of rapidly ageing populations worldwide, this study aims to investigate a cross- country comparison of the relationship between various socioeconomic markers such as education, household wealth, and urbanicity with cognitive decline over 8 years in England and China.

Methods We used data from 7,200 adults aged 50+ from the English Longitudinal Study of Ageing (ELSA) and Chinese Health and Retirement Longitudinal Study (CHARLS), national representative samples of English and Chinese populations. ELSA and CHARLS are similar in their study design and have comparable measures at each wave. For these analyses, we used the available data spanning over 8 years across ELSA wave 5 (20010/11) to wave 9 (2018/19); and CHARLS waves 1 (2011) to 4 (2018). The outcome was the change in memory assessed over time using immediate and delayed 10-word recall tests (max score 20) over 4 waves at every two-year follow-up within each of the two cohorts. We measured socioeconomic status at baseline, including individual-level (education and wealth) and area-based characteristics (urban/rural) with similar comparable measures within each cohort. Educational attainment was similarly classified into three categories: below A-level, A-levels or equivalent, and university degree. Total housed wealth was classified into quintiles. The associations between each SES marker and cognitive decline over an 8-year follow-up were examined by linear mixed models assessed comparatively within each country.

Results In English adults, we found a significant protective association between higher levels of education and baseline memory (intercept beta (β) =7.8, standard errors (SE)=0.15) with a β =1.9, SE=0.9 higher memory scores for those with vocational training and β =2.9, SE=0.2 for those with a degree. A slower decline in memory over time was observed for those with intermediary education β =0.6, SE=0.2 independent of all covariates. These associations were similar across countries but with more robust protections for those with intermediate levels of education in the Chinese population compared to England. Lastly, there was a significant positive association between living in an urban area and higher baseline memory with β =0.9, SE=0.6 and slower memory decline over time β =0.6, SE=0.1, particularly in China, but not in England. No associations were found with the level of wealth.

Conclusion These results imply that a socioeconomic advantage in terms of higher education at the individual level was associated with a slower memory decline over almost a decade both in England and China, with a most pronounced difference in participants living in rural China. Public health strategies for preventing cognitive decline should target socioeconomic gaps to reduce health disparities and protect those particularly disadvantaged.

Friday 17 September

Inequalities, 13.00 - 15.30

OP73 | LOCAL HOUSING SERVICES SPENDING AND PREMATURE MORTALITY IN ENGLAND: A LONGITUDINAL ECOLOGICAL STUDY*

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Background The UK 2008 financial crisis led to austerity measures being introduced in the UK, severely affecting local government. Cuts to central government funding have led to reduced income for spending on local services that potentially promote health, such as housing services. Housing services include a variety of critical services targeted at providing homelessness prevention and relief. There is an extensive body of evidence demonstrating an association between housing, homelessness and poor health. We investigate whether those areas that experienced a greater decline in housing services