and labour market. Time trends of SII and RII were tested during the period of economic stagnation 1992–2013.

Results Overall, age-standardised self-rated good health was high among children (70%) and low among the older old (30%). In all age groups, prevalence of good health declined slightly from its peak in 1995 but increased after 2007. In 1992 among children, working-age adults and younger old, health inequality based on SII for net household income was small (approximately 10% lower prevalence of good health in those with lowest compared to highest income). Among working-age adults, time trends of health inequalities between 1992 and 2013 were curvilinear. The SII narrowed and then widened after 2002 (quadratic trends in men and women p<0.05), resulting in the magnitude of health inequality returning to its level at the beginning of economic stagnation in 1992 but not exceeding it. Time trends in relative inequality (RII) were qualitatively similar to those in absolute inequality (SII). Health inequality narrowed and then widened, and the RIIs in 2013 was no larger than those in 1992.

Conclusion The long-term low-growth Japanese economy appears compatible with maintaining and improving population health and holding health inequalities at current levels. This evidence is of great significance for sustainable development and the health of current and future generations.

Friday 11 September

Transport

OP87 **EXPLORING GENDERED ACTIVE TRAVEL BY POOLING AND SYNTHESISING QUALITATIVE STUDIES**

[1]E Haynes*, [2]J Green, [1]R Garside, [3]MP Kelly, [1]C Guell. [1]*European Centre for Environment and Human Health, University of Exeter Medical School, Truro, UK;* [2]*School of Population Health and Environmental Sciences, King's College London, London, UK;* [3]*Cambridge Institute of Public Health, University of Cambridge, Cambridge, UK*

Background Encouraging incidental physical activity is an important strategy to improve population health. Recent research has drawn on social practice theory to describe the recursive and relational character of active living, which could help to understand conditions for change. A growing evidence base suggests that gender should be considered amongst these conditions as an independent influence on travel behaviour, and qualitative studies have been particularly valuable to understand differential experiences. Our aim was to upscale insights from individual contexts, by synthesising data from primary qualitative research studies, to explore gendered patterns within active travel practices.

Methods We pooled 280 transcripts from five research projects conducted in the UK, including a range of populations, travel modes and settings. All data included gender descriptors, but most studies did not set out to study gender specifically. Text analytics software, Leximancer, was used in the first phase of the analysis to produce inter-topic distance maps to illustrate inter-related 'concepts'. These maps guided a second researcher-led interpretive analysis of text excerpts to infer meaning from the computer-generated outputs, whilst maintaining sight of the explanatory strength of qualitative data and its social theoretical framing or original context.

Results Our interpretative findings indicate gender differentiated experiences and travel narratives. Firstly, focusing particularly on respondents' commutes (travelling to and from work), and guided by social practice theory, we identified 'interrelated' and 'relating' practices across the pooled datasets. Women largely spoke about how their journeys associated with their commute were 'bundled together' as a series of multifunctional trips that included the school run or shopping, whereas men described relatively linear journeys from A to B but highlighted 'relating' practices to their journeys, such as showering after cycling to work. Secondly, we identified a gendered difference in the way men and women spoke about travel practices across contexts, particularly with reference to safety or danger. Women spoke more about themselves as actors in travel, how they are identified and their internal feelings of safety ('I feel unsafe'), and men's talk was more outwardly framed, and in terms of danger spoke about external conditions ('it is a dangerous road').

Conclusion Our research highlights gender differential experiences and accounts of travel experience. These findings can inform future research and policy decisions that aim to promote healthier travel practices, by emphasising the need to consider how gender (and other social positions) might shape practices and accounts of those practices.

OP89 **A NATURAL EXPERIMENTAL STUDY OF NEW WALKING AND CYCLING INFRASTRUCTURE ACROSS THE UNITED KINGDOM: QUANTITATIVE ANALYSIS OF USE AND PHYSICAL ACTIVITY**

[1,2]A Le Gouais*, [1,2]J Panter, [1,2]J Woodcock, [1,2]D Ogilvie, [1]L Foley. [1]*MRC Epidemiology Unit, University of Cambridge, Cambridge, UK;* [2]*Centre for Diet and Activity Research (CEDAR), University of Cambridge, Cambridge, UK*

Background Physical inactivity is a growing problem, increasing risks of non-communicable disease. Changing the built environment, including the provision of walking and cycling infrastructure, can influence population levels of physical activity, but high quality evaluations of these interventions are scarce. We demonstrate how different types of data can be used to investigate how context is associated with change in use of new walking and cycling infrastructure, and the association between use of infrastructure and overall physical activity.

Methods We combined insights from multiple 'routine' and academic data sources. We conducted repeat cross-sectional pre-post analysis of pragmatic monitoring data from 84 new walking and cycling routes in the United Kingdom (the 'Connect2' programme), using four-day manual counts (pre n=189,250; post n=319,531), route intercept surveys (next-to-pass) (pre n=15,641; post n=20,253), and automatic count data which generated total estimated annual users, alongside longitudinal data from the iConnect cohort which involved postal questionnaires with local residents near three of the Connect2 schemes at baseline, 1-yr (n=1853) and 2-yr follow-up (n=1524). Multivariable binary logistic regression analysis was conducted using R to analyse:

1. Contextual features associated with increases of at least 50%, and doubling, of pedestrians, cyclists and particular user sub–groups. Models were adjusted for each independent contextual variable and time from infrastructure completion to post–monitoring.