

Health: The Design, Planning and Politics of How and Where We Live

- **Paper / Proposal Title:** The impact of built environment restructuring on adult health: A scoping review from a behavioural science perspective

- **Format:** Presentation (in-person)

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- **Abstract (300 words):**

Built environment restructuring and urban planning are approaches to improve public health by providing opportunity for healthy behaviours. Another approach targets individual behaviour within places using behavioural science. How well these approaches intersect is unclear but recent reports suggest potential for integration. We reviewed evidence from environmental restructuring projects and their impact on health outcomes was synthesized using behavioural science frameworks: the COM-B model of behavior change (Michie, van Stralen, & West, 2011) and the Theory Domains Framework (Cane, O'Connor, & Michie, 2012). Established scoping review methods were implemented. Findings were based on 23 studies reporting *both* built environment restructuring and measured behavior change related health outcomes in adults identified in public health, architecture, psychology, and urban design database searches. Projects targeted active travel (43.5%), urban green facilities development (34.8%), or New Urbanist neighbourhoods (21.7%). Evidence supported positive

impacts on physical activity, as well as some impact on stress, general health, quality of life, and social isolation. Explicit mention of underpinning theory was lacking generally. Reported outcomes were highly relevant to drivers of health behaviour (COM-B) and domains of behaviour change (TDF), including social/physical opportunity, automatic/reflective motivation, and physical/psychological capabilities through beliefs, emotion, environmental context/resources, intention, skills, and social influences. Few reports included outcomes other than physical activity; we recommend use of more varied outcomes based on national/international indicators to facilitate comparison. There was limited exploration of barriers and nuisances that arose from projects, suggesting this as an area of future enquiry. One pressing recommendation is that relevant theory guiding design should be clear; cross-disciplinary teams should consider how to integrate these over the varying layers of influence on health behavior.

• **Author(s) Biography (200 words each):**

Dr. Stephanie Wilkie is an Environmental Psychologist with interests in the influence of urban green space and built environments on wellbeing, as well as expertise in research methods and statistics including large-scale studies for the US government. She is a Chartered Psychologist and associate member of FUSE, the Centre for Translational Research in Public Health.

Tim Townshend is Professor of Urban Design for Health at the School of Architecture, Planning and Landscape, Newcastle University, UK. Over the past decade Tim has established an international research profile on the relationship between the built environment and human health/wellbeing. He has been part of a number of multidisciplinary research projects exploring issues as diverse as obesogenic environment, the benefits of urban parks, and mobility and ageing; and he has published on an equally diverse range of topics. He has delivered addresses at a number of international conferences and events and has sat on national bodies and advisory committees. His work always aims to be practice relevant and his involvement with the recent ESRC 'Reuniting Planning and Health' seminar series which has brought together practitioners and academic from health and planning disciplines, is testament to this. In 2016, the Royal Society for Public Health, UK, awarded him a prize for his article on obesogenic environments.

Dr. Emine Mine Thompson is an independent researcher (previously at Northumbria University). Trained as a landscape architect, she has established wide-ranging expertise in areas related to digital urbanism, in particular to smart and future cities, virtual city modelling, city information modelling, virtual reality and augmented reality.

Jonathan Ling is a Professor of Public Health with interests across the breadth of public health and health sciences. A Fellow of the Royal Society of Public Health, the Higher Education Academy and a Chartered Psychologist, he is also a member of the NIHR

Health Services and Delivery Research Specialty Group for the North East and North Cumbria, and the Regional Advisory Panel for the NIHR Research for Patient Benefit. Jonathan has been awarded national funding from the NIHR, Public Health England and the ESRC, as well as the NHS and other local organisations.