

The Effects of Social Participation on Health and Well-Being: Evidence using a Spatial Marginal Treatment Effects Model

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Social Capital

Social Participation

Community Trust

Asset Mapping

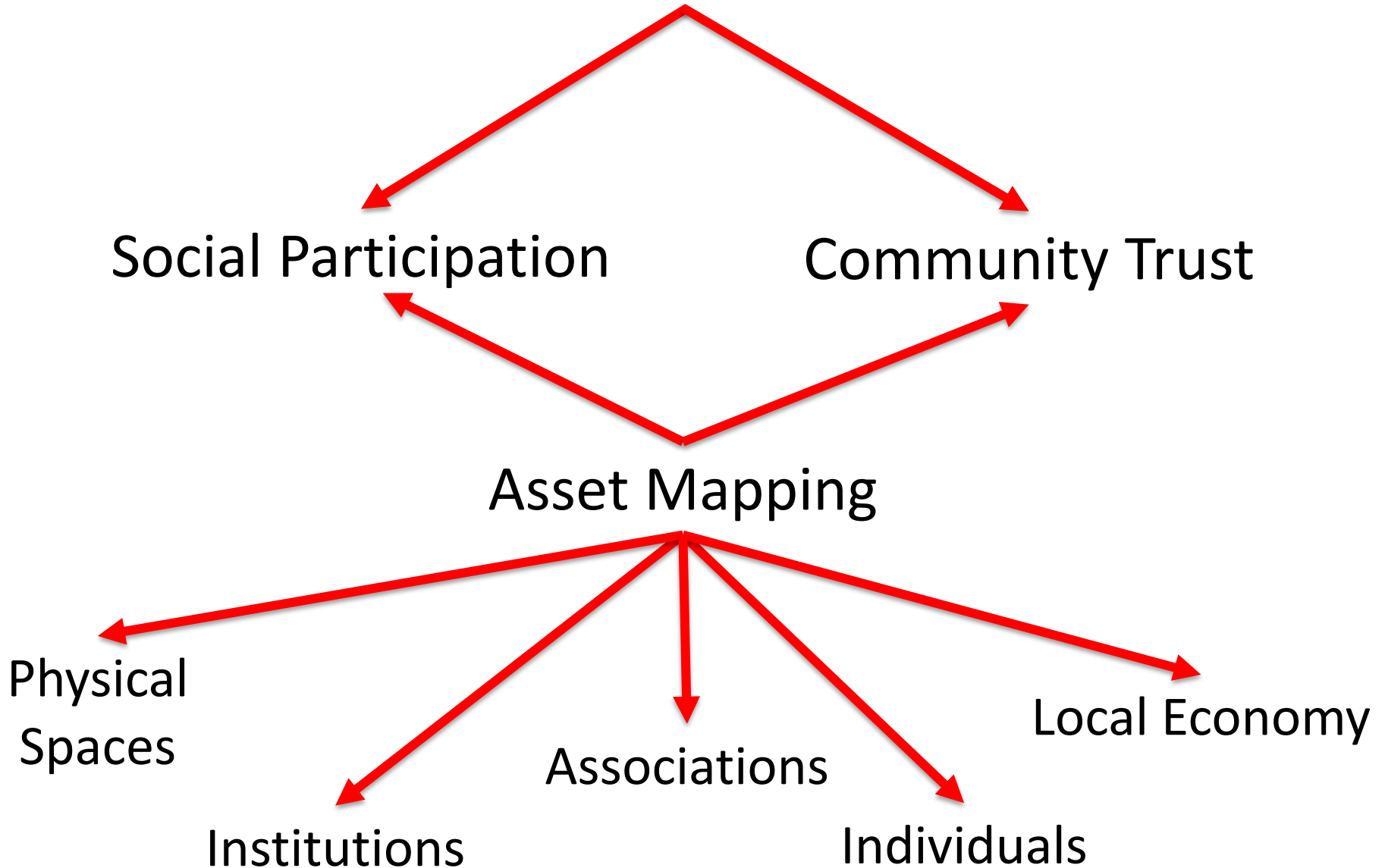
Physical Spaces

Institutions

Associations

Individuals

Local Economy



Introduction

- Social capital broadly improves health outcomes¹, with health dis-benefits for certain population groups²
- Social participation has lead to improved health outcomes³ and reduced mortality^{4,5}
- Access to community assets facilitates participation⁶ – in terms of walkability and proximity⁷
- Endogeneity concerns due to reverse causality around social participation^{8,9} and selection bias¹⁰

Aims

1. to estimate the health and well-being returns to social participation
2. to further examine if these effects/returns vary by propensity to participate.

Data I

UK Household Longitudinal Study – LSOA Special License

Social Participation – social and interest group membership

“I am going to read a list of types of organisations. For each, tell me whether you are a member of an organisation of that type”

Option	Group	Option	Group
1	Political party	9	Scouts/Guides organisation
2	Trade Unions	10	Professional organisation
3	Environmental group	11	Other community group
4	Parents'/School Association	12	Social/Working men club
5	Tenants/Residents Group	13	Sports Club
6	Religious/church organisation	14	WI/Townswomen's Guild
7	Voluntary services group	15	Women's Group/Fem organisation
8	Pensioners group/organisation	16	Other

Data II - Outcomes

Health – *“How is your health in general?”*

Poor (1), Fair, Good, Very Good and Excellent (5)

Well-being - SF12 – Mental Health Component

Derived from 6 questions on a 6-point Likert scale

Measure ranges from [0,100] with a mean = 50 and standard deviation = 10

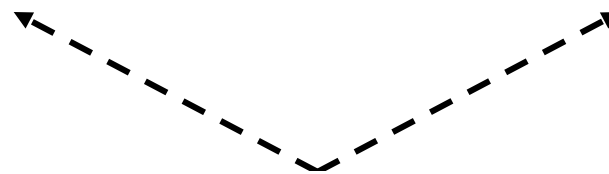
Community
Assets



Social
Participation



Health or
Well-being



Error Term

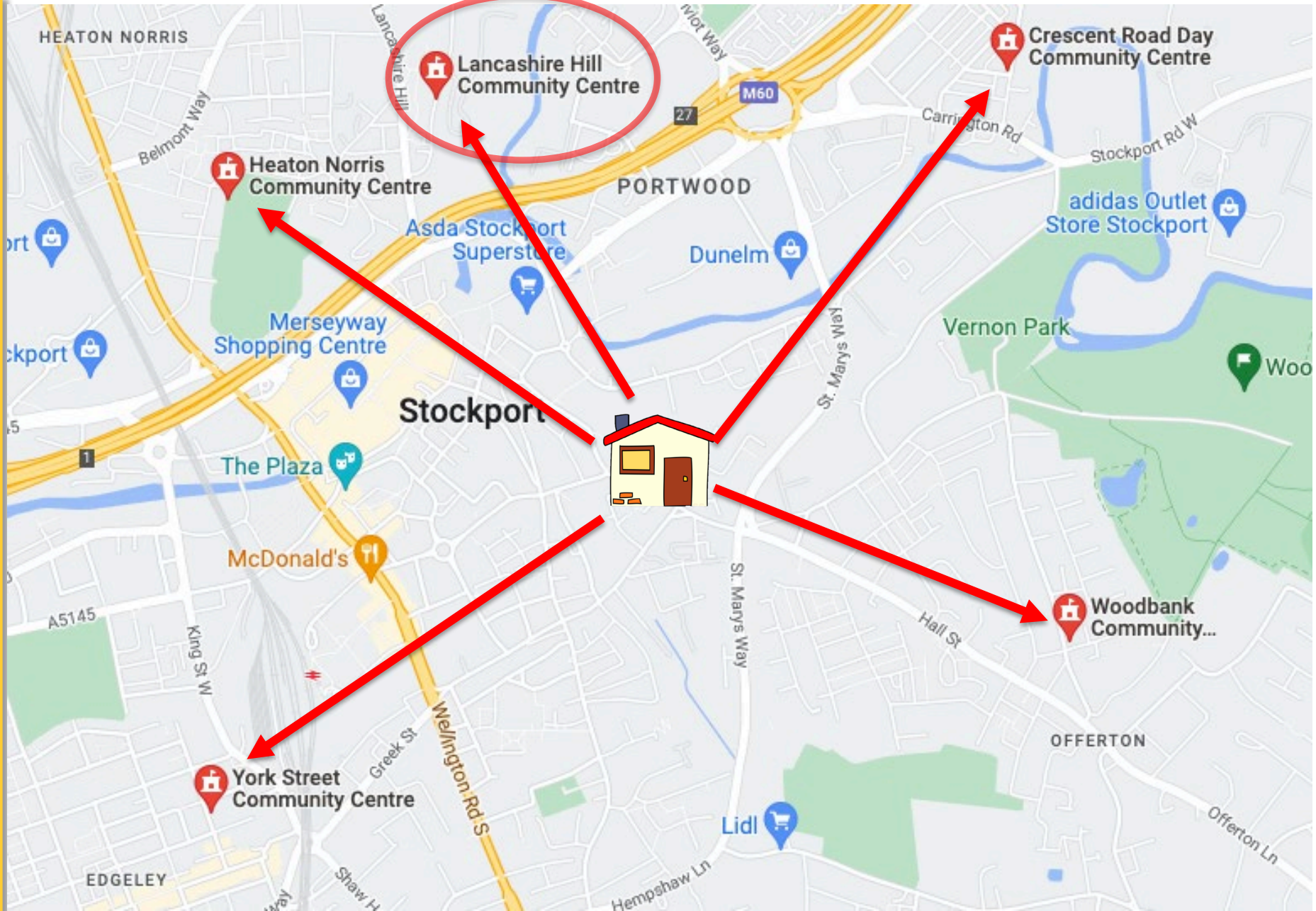
- Community centre/hall
- Sports centre/facility/club
- Church/place of worship
- Youth club/centre/facility
- Asset of Community Value



Availability – if within 1km of LSOA centroid



buildings or green areas which individuals or organisations within the community nominate to their local authority to have additional protection under the Localism Act



Assets are mapped within Greater Manchester

Methods – Marginal Treatment Effects

1st Stage:

$$\widehat{social\ participation}_i = \delta + \mathbf{assets}_i\theta + \mathbf{controls}_i\varphi + v_i$$

2nd Stage:


$$outcome_i = \alpha + \beta\widehat{social\ participation}_i + \mathbf{controls}_i\gamma + \varepsilon_i$$

3rd Stage:

estimate treatment effect across propensity scores from 1st stage

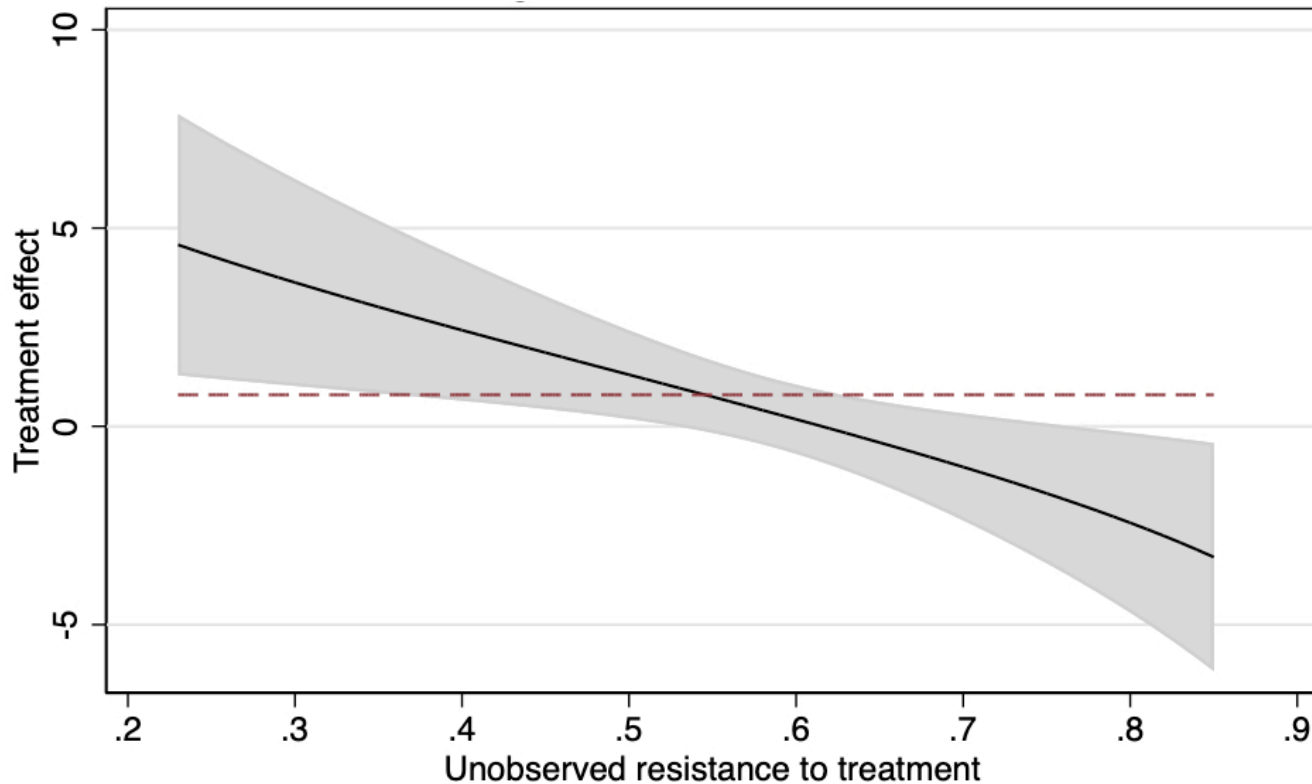
Additionally, we estimate:

Average Treatment Effect (ATE), Average Treatment Effect on Treated (ATT),
Average Treatment on Untreated (ATU) and Local Average Treatment Effect (LATE)

Results

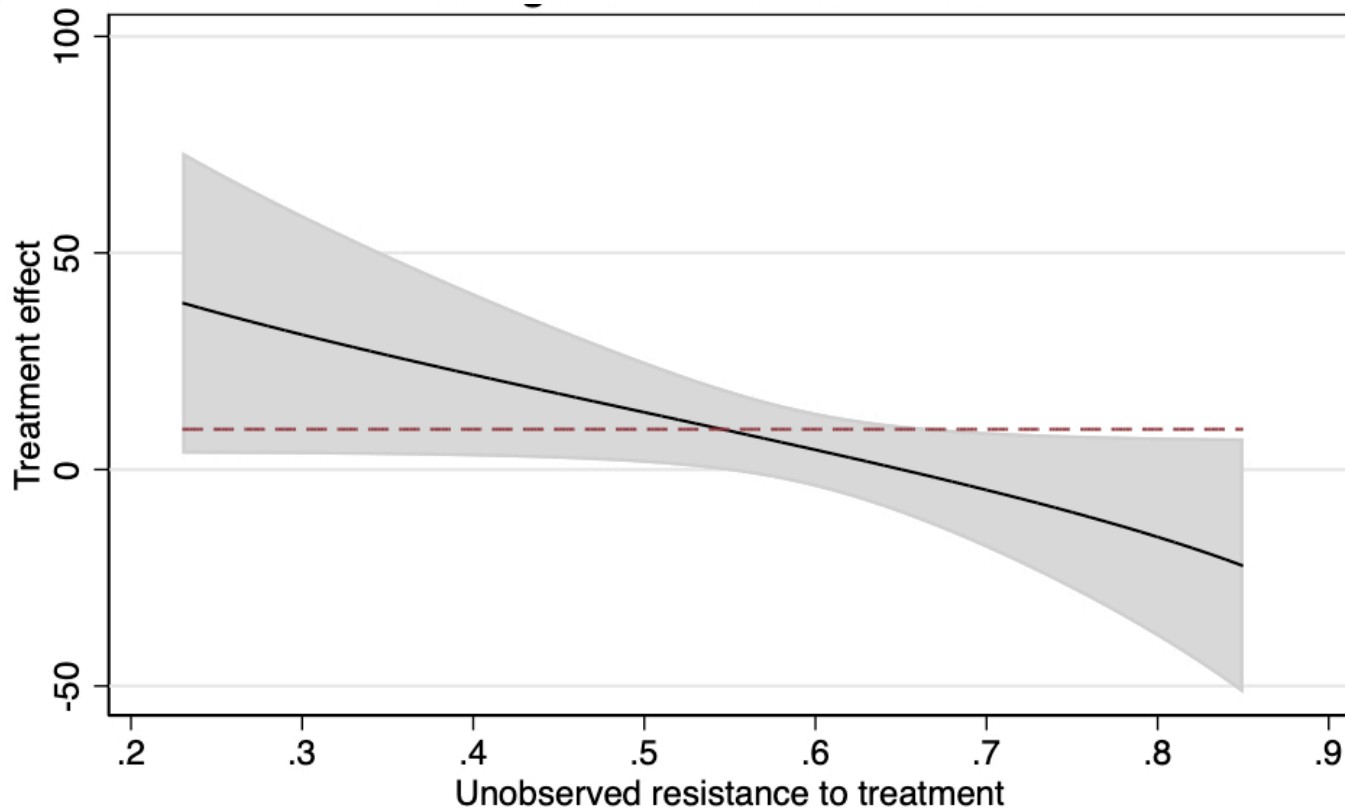
	(1)	(2)
	Binary 1km (Mean)	1 st Stage – Social Participation (Average Marginal Effect)
Church/place of worship	0.895	0.034 (-0.017 to 0.085)
Youth club/centre/facility	0.543	0.063*** (0.026 to 0.099)
Sports centre/facility/club	0.366	-0.037* (-0.070 to -0.003)
Community centre/hall	0.477	-0.016 (-0.048 to 0.016)
Asset of Community Value	0.467	0.044** (0.011 to 0.077)

Results - Health



	Health
ATE	0.795 (-0.127 to 1.717)
ATT	2.237** (0.554 to 3.920)
ATU	-1.016 (-2.367 to 0.336)
LATE	0.384 (-0.519 to 1.287)
Obs	3,737

Results – Well-being



High Probability
of Social
Participation



Low Probability
of Social
Participation



	SF12 -Mental
ATE	9.304 (-0.103 to 18.710)
ATT	20.137* (2.332 to 37.943)
ATU	-4.276 (-17.677 to 9.125)
LATE	9.552* (0.503 to 18.602)
Obs	3,737

Discussion

- Community asset infrastructure is a strong predictor of social participation, particularly youth clubs and assets of community value (ACV)
- There are significant returns to outcomes for those more likely to engage in social participation
- This may lead to widening on existing health inequalities
- Empowering individuals within communities of currently low social participation rates to engage with nominating ACV could have equitable benefits.

References:

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