

Systematic Review

Title: Envisioning Happy Places For All: A systematic review of the impact of transformations in the urban environment on the wellbeing of vulnerable groups

Supplementary File S3 – Table of Study characteristics

Authors	Year of publication	Context (city, country)	Site level of intervention	Sample	Population of interest	Intervention	Population engaged in process	Study methods	Outcome	Results
Afacan, Y. [33]	2015	Ankara (Turkey)	Neighbourhood	N = 200 residents, randomly selected. 110 women and 90 men, age range: 22-88	Older people Families with children	Neighbourhood regeneration via development of housing and roads	No	Quantitative: survey	Wellbeing as belonging and agency - Satisfaction with physical and social aspects of neighbourhood after regeneration (ad-hoc measure)	Older residents less satisfied with traffic safety and crime than young residents. Married residents with children unsatisfied with accessibility
Anthun, K.S., Maass, R.E.K., Hope, S., Espnes, G.A., Bell, R., Khan, M., Lillefjell, M. [34]	2019	Malvik (Norway)	Road level	2-Wave Survey: N = 989 W1; N = 2072 W2. Interviews: N = 14 All adult residents in the area	Low income or socioeconomic status	Improvements to walking/cycling path linking residential area to town centre	Partially	Mixed-method - questionnaire surveys and structured interviews + digital counts	Wellbeing as Agency - Satisfaction with the availability and 'quality of neighbourhood resources' was measured using single items describing assessments of outdoor	Low SES least satisfied with availability and quality despite high use. Role of location, quality and availability of paths.

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									facilities (nature contact and seaside facilities), facilities for physical activity, and cycle paths.	
Beebeejaun, Y. [35]	2009	London, Manchester, Bristol and Wolverhampton (England)	Community	Sample size or demographics not specified	Women	Community development through User-driven identification of security and safety in public urban spaces	Full	Qualitative: interviews, naturalistic observations	Wellbeing as agency, perceived safety (Fear O Meter, a simple visual device where women record contributing factors to feeling safe or unsafe)	Design factors that influence natural surveillance on the street, such as lighting and landscaping, affect women's perceptions of safety
Foley, L., Prins, R., Ogilvie, D., Crawford, F., Humphreys, D., Mitchell, R., Sahlqvist, S., & Thomson, H. [36]	2017	Glasgow (Scotland)	Urban road infrastructure	All adult residents in the area Long cohort N = 365. Repeat cross-section T1 N = 980, T2 = 978. Full T2 sample = 1,343	Comparisons of deprived and non-deprived communities	8Km extension to an urban motorway	Partially	Quantitative: Quasi-experimental evaluation (survey + health records) at 2 timepoints	Mental wellbeing: Warwick-Edinburgh Mental Well-being Scale; SF-8	Living near to either a newly constructed or an existing urban motorway had a negative impact on residents' mental wellbeing. I

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Gosling, V. [37]	2008	UK (city not named)	Neighbourhood	21 women between 18-80 years old.	Women	Community regeneration: Housing redevelopment with refurbishment or demolition of buildings; refurbishing of public spaces	Partially	Qualitative: participant observation, preliminary focus groups and interviews, followed up by semi-structured interviews	Wellbeing as belonging and agency (perceived social exclusion,, ad-hoc measure)	Reports on fear and isolation during the urban regeneration processes specially for lone mothers and older women.
Macmillan, A.K., Mackie, H., Hosking, J.E., Witten, K., Smith, M., Field, A., Woodward, A., Hoskins, R., Stewart, J., Van der Werf, B. & Baas, P. [38]	2018	Auckland (New Zealand)	Walking/cycling road infrastructure	N=360 children and N =720 adult participants	Children Area-level low socioeconomic status	Retrofitting of walking and cycling infrastructure.	Full	Mixed-methods - controlled before-after intervention.	Wellbeing as agency: Residents' satisfaction.	No outcomes of intervention reported, but co-creation highlighted as having positive impact on the process
Pastor, M., & Morello-Frosch, R. [29]	2014	Multiple cities in, California (USA)	Metropolitan areas and Neighbourhoods	Sample size or demographics not specified	Area-level low socioeconomic status	Intervention: building healthy communities though urban design, compact development, walking/cycling infrastructure, green areas)	No	Review. No empirical study – it includes examples and cases studies and initiatives.	Wellbeing as agency and belonging (not clear definition or measurement)	Community involvement and bottom-up approach contributed to better wellbeing and less distress
Pérez del Pulgar, P.C., Anguelovski,	2020	Barcelona (Spain)	Two urban parks	Sample size or demographics not specified	Children	Creation of green play	No	Qualitative - archival and ethnographic	Relational wellbeing (i.e., derived from	Different conditions of access,

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I., & Connolly, J. [39]						spaces in two neighbourhoods		observation methods	social relations, connections, interactions)	utilisation and socio-material design of the two parks influence children relational wellbeing, free play and observed contact with nature. Diversity of design promotes play more than unstructured green.
Semenza, J.C., March, T.L., & Bontempo, B.D. [40]	2007	Portland, Oregon (USA)	Three neighbourhoods	N=674, over 21 years old. 55% women, 45%men	Area-level low socioeconomic status	Ecological urban renewal and construction of attractive urban places	Full	Mixed methods: Workshops: situation analysis and extensive outreach to community members, and survey pre/post intervention.	Depression (CESD-11), Wellbeing (SF-36), Social capital as measure of belonging (ad-hoc measure of sense of community, social interaction, perceived control, and	High sense of community (well-developed sense of place), low social interaction. Increase in social capital and decrease in depression.

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									neighbourhood participation)	
Ward Thompson, C., Aspinall, P.; & Roe, J. [41]	2014	Glasgow (study 1) Edinburgh and Dundee (Study 2) (Scotland)	Urban woodlands	Two case studies 1) Community that experienced change compared to community that did not experience change. 2) impact on stress of living in areas with more or less green	Area-level low socioeconomic status	Improvements to urban woodlands	Partially	Mixed-methods Repeat Cross-sectional survey	Wellbeing (Warwick-Edinburgh Mental Wellbeing Scale) Stress (Perceived Stress Scale) Agency - Satisfaction with neighbourhood quality of life (ad hoc measure).	Higher levels of access to green areas relate with lower levels of stress and mental wellbeing for both men and women. Social contact in green spaces is linked with lower levels of stress for both and higher levels of wellbeing just in men not for women. In Dundee the stress levels were associated with the quantity of green space and not so much with the quality according to the cortisol survey.

