Inclusive and transdisciplinary wellbeing research

New directions in urban wellbeing research and practice

August 2021



The Centre for Urban Wellbeing

The Centre for Urban Wellbeing (CUWb) is committed to exploring and modelling inclusive and transdisciplinary approaches to urban wellbeing research and practice. We are developing co-productive processes to include people from across a wider urban system to shape wellbeing. We develop mutually-beneficial ways of working with policy and community partners to help ensure local solutions can be informed by the best global research and evidence to address wellbeing inequalities in urban environments.

This briefing explains the urgent need for translating wellbeing research into action to address urban and regional inequalities. It sets out cases where transdisciplinary approaches have been used effectively to advance community wellbeing.

The Centre for Urban Wellbeing has five working principles:

- 1. To question the concept of wellbeing, helping to develop more sensitive definitions and increase the impact of wellbeing research
- To consider the conditions needed for innovation at the interface between research and practice
- 3. To investigate the use of interdisciplinary and transdisciplinary methods to develop more rigorous and inclusive evidence to inform systemic and complex policy challenges
- 4. To seek out, support and sustain meaningful engagement with stakeholders at all levels, evaluating the processes and outcomes of co-productive working
- 5. To work with humility, encouraging reflection and 'slow' working to overcome the biases that hubris and speed are prone to create

For more information: https://www.birmingham.ac.uk/research/centre-urban-wellbeing/home-page.aspx

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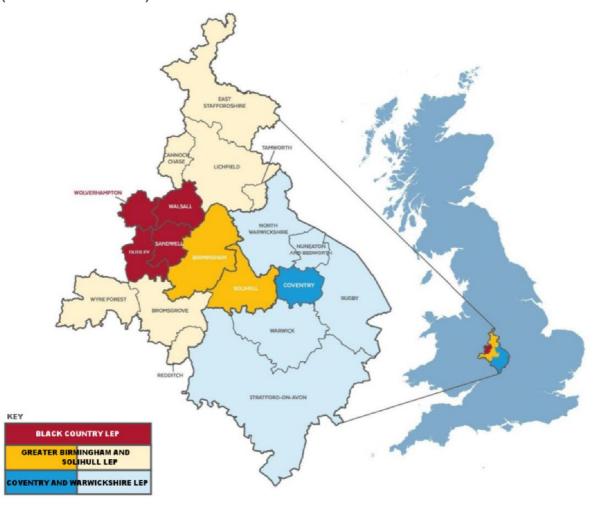
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Towards an urban wellbeing strategy for the West Midlands (UK): centring community renewal

Birmingham is a major global city region in the West Midlands of the UK dealing with significant urban challenges including stalled levels of productivity, high unemployment, health inequalities and substantial areas of deprivation. For example, in all five local authority areas in Birmingham and the Black Country (Birmingham, Dudley, Sandwell, Walsall, Wolverhampton), both life expectancy and healthy life expectancy – the number of years lived in 'good' health – are below the national average for England, and there are significant differences between and within local areas. In Walsall, the healthy life expectancy is 56 years, 8 years less than the English average. Productivity in the Black Country is around £9 below the English average at £26.50 economic output per labour force hour (£32.30 for Birmingham). Employment rates for 2019 in the Black Country (65%) fell well below England (75%), and 400 local areas in the region are among the most deprived nationally according to the Index of Multiple Deprivation 2019 ¹. All of these have factors been exacerbated by the Covid-19 pandemic.

Figure 1: Birmingham, Black Country, and Coventry and Warwickshire Local Enterprise Areas (Source: Lee et al 2016) ²



Local and regional authorities have long-term partnerships with businesses to develop strategies for local economic development. These issues are well-known, and long-term strategies such as the Birmingham and Solihull Local Enterprise Partnership (LEP) strategic economic plan – which covers 9 local authorities from Redditch in the South to East Staffordshire in the North (Figure 1) – aims to: increase workforce productivity, skills and innovation; increase inward investment, business survival and growth; expand exports and enable inclusive growth which tackles unemployment ³. The West Midlands Combined Authority (WMCA), which represents a partially overlapping group of 6 local authorities shares this vision, asking the UK government to support a £1.5m business growth programme, £732m for training and skills, and £369m for the cultural sector ⁴.

Adopting an overarching strategy to tackle urban wellbeing inequalities is necessary to mitigate the over-reliance on the trickle down effects of prospective economic development. An approach which is more focussed on community development could advance the shared social fortunes of the region. In the current terms of the UK Government ⁵, 'Levelling-Up' requires more than a piecemeal and short-term set of funding initiatives and instead needs a multi-sectoral, large scale approach to address stark inequalities, empower local leaders, and secure conditions which are known to support the wellbeing of communities.

An urban wellbeing strategy approaches wellbeing as a property of communities and places rather than of individual people. It invests in community infrastructures, community capacity building, community engagement, spaces and community wealth building, while recognising the limitations of an overly localised approach which does not tackle more systemic inequalities ⁶. Research and

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evidence to inform an urban wellbeing strategy acknowledges past failures to secure place-based regeneration. It directly involves communities, prioritises tackling inequalities within places, and addresses the underlying structures which drive these geographical differences ⁷. It needs transdisciplinary approaches beyond traditional economics to bridge sectors, innovate in methods and drive transformative change.

There are clear signals that local decision-makers take urban wellbeing seriously. The 2021 regional Covid Recovery plan from the local authority, Birmingham City Council, aspires to build inclusive, equitable and just

communities, lowering carbon emissions, developing increased resilience and strength, and more effective public services. Their Urban Centres Programme is looking to support a range of projects to

stimulate the re-invention of local centres and transform them into "diverse, well-connected, unique hubs at the heart of local communities" ⁸. The plans demonstrate the clear value put on developing places, strengthening communities, collaborative public services and support for voluntary and community sector organisations. Furthermore, the Birmingham City Council Delivery Plan 2020-22 establishes clear commitments to community based solutions, 'relational' forms of welfare based on communities and professionals sharing "a common mission to help people stay afloat and then thrive," and using the proceeds of local growth for social purpose ⁹.

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Regionally, the WMCA have requested £203m from central Government to fund its community recovery priorities based around a Citizens' Panel. These include plans such as funding for the Voluntary and Community Sector, a 'Radical Health Prevention Fund' to address health inequalities at a whole system level and in community-centred ways. There is planned further support for workplace wellbeing programmes and a 'Trauma-informed Region' – shifting trauma from a personal to a public health concern. On employment and local business recovery, there are proposed schemes to enhance training and skills, and support for local businesses and high streets¹⁰. This range of plans highlights how urban and regional authorities are evolving a community focus.

What is community wellbeing?

Community wellbeing is emerging as an important concept to capture social value, but robust indicators and frameworks to measure a community's wellbeing are still in development ¹¹. Several

Community Wellbeing measures are needed which also acknowledge humans as embedded in multiple geographical, social and interest-based communities.

scales have been designed to measure individual wellbeing but they assume the individual to be largely independent, autonomous and intentional ¹². Community wellbeing measures are needed which also acknowledge humans as embedded in multiple geographical, social and interest-based communities.

More social and place-based definitions of wellbeing have therefore been designed to recognise that people's sense of being well is defined by their setting, their social and

professional relationships and networks, and changes over time ¹³. Examples of work developing measures for community wellbeing in the UK are the *Thriving Places Index*, UK, the *Community Needs Index*, *The Co-op Community Wellbeing Index* ¹⁴. These measures are part of an emerging research

field on measuring and explaining the conditions which shape community wellbeing and wellbeing in places, and work is ongoing to develop conceptual frameworks and logic models to support these endeavours.

These approaches are focused on elements of collective wellbeing as it is experienced. In order to develop effective and valid measures, economic, social, physical, environmental and cultural factors need to be integrated. This integration would benefit from thinking across disciplines and generating knowledge with communities themselves; that is, transdisciplinary research ¹⁵.

What is transdisciplinary research?

A transdisciplinary approach goes beyond the integration of academic knowledge from a range of specialisms, instead valuing plural forms of knowledge. It is not therefore simply about combining academic disciplines, but is about "the collective understanding of an issue created by including the personal, the local and the strategic, as well as specialised contributions to knowledge" ¹⁶.

Transdisciplinarity also involves working in the productive spaces between disciplines and knowledge forms, rather than simply across them. It requires the active involvement of researchers and stakeholders during the entire research process, from the formation of the research question through to the dissemination of results. The research process is as important as the research itself ¹⁷.

Complex problems need cooperative, multi-stakeholder and interdisciplinary approaches. As simple as it may sound, researchers, policy makers, the third sector and communities still need to find inclusive ways to synthesise knowledge, translate knowledge into action, and evaluate the impact of this action using multi- and transdisciplinary methods ¹⁸. Whilst interdisciplinary and multi sector

working has been around for a long time, there is evidence that it is often a tick-box exercise, failing to engage meaningfully with communities or across academic disciplines ¹⁹. Action research is a useful way to innovate in community-based research through more collaborative and participatory modes of strategy development and planning.

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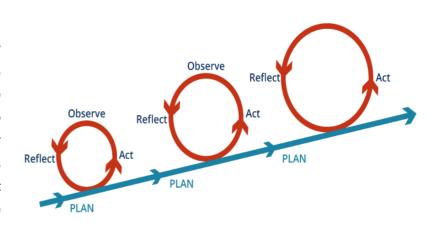
Whilst transdisciplinary working is not

new, attempting to work across boundaries of academic research, linking to public policy agendas whilst meaningfully engaging with community voices is not easy. Navigating difference and harnessing new knowledge takes time and resources that can be hard to access. There are a number of conditions

needed to make transdisciplinarity work, from the capacities and qualities of the individuals involved (of openness, curiosity, willingness to share knowledge) to the ability of organisations to collaborate across departments and institutions, to the types of spaces which need to exist to allow for creative and productive sharing ²⁰. When working across institutions, appreciation of different organisational and sector cultures is needed. Crucially, when engaging with communities there is evidence to show that unless engagement is meaningful it is even *less* effective than or can be counter productive to a top down intervention ²¹.

Valuing the process as much as outcomes important in transdisciplinary working and needs continual reflection as a key component of the action research cycle (Figure 2). This includes personal reflection to surface how individual beliefs and assumptions are shaping the direction of the research. It also requires group enquiry and discussion, to consider how the research as a whole is developing and adapting, as it engages with and responds to the real world problem on the ground 22.

Figure 2: The Action Research Cycle, source: https://aifs.gov.au/cfca/publications/participatory-action-research



Where has transdisciplinary work been used successfully in community and urban wellbeing?

Here we provide some recent case studies of research programmes which have combined research and action to support and improve urban wellbeing, setting out some of the key learning, principles and outcomes which have come from their transdisciplinary and co-productive methods.

Urban Futures

https://gmv.gu.se/urbanfutures

Urban Futures is an international research and knowledge centre based in Sweden which uses and evaluates transdisciplinary coproduction to support practice and research in sustainable urban development. Researchers and practitioners jointly develop and run projects with the aim of 'Realising'

Just Cities' which are fair, green and accessible cities ²³. Originally formed in 2010, it set out to run transdisciplinary comparative research globally, from the UK, Sweden, South Africa and Kenya. The centre is run by eight partners including two universities, two research institutes and four regional government organisations. Projects aim to contribute to urban sustainable transitions by bringing together academics, professionals and other stakeholders.

The Centre has hosted a number of projects under the umbrella of sustainability and urban wellbeing:

- CityAirSim examines how landscape design affects levels of air pollution 24.
- SIGURD develops new valuation systems to inform planning decisions and construction investments ²⁵.
- Accessible Cities looks at the physical, social, economic and democratic accessibility of cities ²⁶.
- Impact of Participation explores the impact of citizen dialogue in three Swedish cities ²⁷.

The project was initiated through setting up Local Interaction Platforms (LIPs) in the different regions where they were focussing their work. LIPs are context sensitive partnerships involving academics, local government officials and community stakeholders ²⁸.

A major positive outcome of the whole project was successful cross-cultural learnings and translation from one context to another. The work put into knowledge alliances in the early stages has helped facilitate on going work beyond the projects. Another output from the project was a bespoke quality monitoring and evaluation framework. The evaluation framework included a formative evaluation looking at building the groundwork for co-production, direct project related effects, the context of the project and wider indirect social effects ²⁹.

Jam and Justice: Co-production urban governance for social innovation

https://jamandjustice-rjc.org/about-jam-and-justice

Jam and Justice was a four-year research project, 2016 to 2020, funded by the ESRC and Mistra Urban Futures, looking at how to work collectively to tackle urban issues. The research involved the Universities of Birmingham, Manchester and Sheffield, and the Greater Manchester Centre for Voluntary Organisation, together with a group of 15 co-researchers from diverse walks of life but with a shared desire for social change, called the Action Research Collective or ARC³⁰.

This research took place in Greater Manchester, against the backdrop of city-regional devolution which was seen to offer an opportunity to think differently about how to govern the city. The research aimed to 'test ways to connect decision-makers, civil society and citizens ('the jam'), and to bring attention to

how to involve those usually excluded from such processes ('the justice')'31. The project focused on co-production and what it could offer in terms of re-thinking how cities could be governed.

The research involved a series of action research projects, using co-production to help think through different questions and challenges faced by cities, from: how energy is produced for cities, how public money could be spent to produce more social value, how older people could be better supported to live a good life in their own homes, and what new roles local politicians could play to work even more productively with communities. Each approach drew on different research methods, from deliberative methods like a citizen's jury to creative approaches like community-based photography.

The researchers identified seven practices that supported co-production³²:

- 1. *Designing in openness:* An ongoing process of 'designing' how people can participate in a way that both influences outcomes, but also reflects shared values.
- 2. Shaping the dynamics of participation: Using spaces for participation which disrupt rather than simply reinforcing the usual ways of thinking and doing.
- 3. *Blending expertise*: Valuing different kinds of knowledge and expertise so that participation is more than the sum of its parts.
- 4. Humanising experiences: Connecting with human experience and emotion helps to mobilise energies and commitments for change.
- 5. *Linking voice and values*: Enabling co-production is about placing values at the heart of efforts to bring about change.
- 6. Connecting with formal policy decision-making: Working between different interests and across boundaries is important in influencing change.
- 7. Holding the process: To protect values and mediate tensions, holding the process is critical.

The research suggested that co-production could play a role in addressing the democratic, justice and knowledge challenges faced by cities through:

"opening processes for people to get involved in debating, discussing and shaping public policy who would not normally be engaged; creating synergies between different ways of knowing, evidencing and designing policy; [and] seeding change towards fairer outcomes, particularly for the most marginalised and excluded"33.

Jam and Justice engaged over 700 people and 200 organisations through over 50 briefings and events focusing on a diverse range of city regional issues and concerns in Greater Manchester, and directly contributed to the adoption of the principle of 'co-production' as a policy across the work of the Greater Manchester Combined Authority (GMCA).

Wellcome Centre for Cultures and Environments of Health

https://wcceh.org/about-us/

The *Wellcome Centre for Cultures and Environments of Health*, based in the University of Exeter, is a transdisciplinary research centre working across traditional academic disciplinary boundaries and methodologies. The Centre focusses on research that enables health and wellbeing. It aims to transform the way we think about public health, reversing the term and instead proposing the idea of "healthy publics", how we create contexts and spaces which support health in communities across the life course ³⁴.

The Centre challenges applies what they describe as, a more open research method. A collaborative ethos is intended between academics, organisations, public bodies and individual citizens. The Centre also encourages on going personal reflection, stating that engaged research needs new cultures. Their research strategy sets out an intention for all the Centre's research to be "created, conducted and engaged in, with and by, people whose lives are affected by the research and its outcomes, on the basis of reciprocal respect" ³⁵. Projects are designed to trial and test strategies to realise this intention, a number of which are listed below.

Several flagship projects have attempted to model best practice in terms of engagement and transdisciplinary working. These initiatives have focussed on how research can support cultures and environments' which will sustain health. Projects have included: The impacts of loneliness and social isolation on health ³⁶; the value of evidence in health policy ³⁷; the impact of relationships on children's health ³⁸; and the impact of transformative engagement on conditions for health ³⁹.

According to research coming out of the Centre, transdisciplinarity helps projects be more democratic, non-hierarchical and ensures expertise is accessed at all levels, including academic, lived experience and practitioner. Working in this way challenges the usual limited bounds of academic knowledge, but it is not an easy task. Accessing and integrating lived experience can be difficult given the project is funded through and managed by academics. It requires reflection and the relinquishing of control over spaces and user involvement. In one project, *DeStress*, a 'community connector' was used to act as a 'bridge' and between academics and community partners. A trusted member of the community, they ensured meetings took place at appropriate times and within community rather than university spaces, allowing for work commitments and childcare, and consulted with community partners such that information was shared in ways that worked best for them ⁴⁰. Overall, the time and resources put into relationship building supported clearer understandings of the problem and potential solutions ⁴¹.

Transdisciplinary Research for the Improvement of Youth Mental Public Health

http://triumph.sphsu.gla.ac.uk

The *TRIUMPH* (*Transdisciplinary Research for the Improvement of Youth Mental Public Health*) *Network* is a collaboration of academics across multiple disciplines, young people, health practitioners, policy-makers and voluntary organisation led by the University of Glasgow. It was launched in 2018 and focusses on mental health issues in young people, focusing on vulnerable, disadvantaged and minority populations, with a particular focus on those who are care-experienced and LGBTQ+. The network funded four projects in 2020, informed by a research priority-setting exercise involving young people involved in the review panel responsible for selecting the successful projects ⁴².

The project uses transdisciplinarity to investigate a wide range of social determinants of health and avoid the tendency of the traditional sciences of psychology, psychiatry, and medicine to view mental health as an individual problem. Projects include: The co-production or adaption of interventions for foster care; STEP Study: Schools Training to Enhance support for LGBTQ+ young people; Reprezent's On the Level – Covid-19 mental health programme in schools; and CESAME: Culturally Engaged and Sensitive Approaches to Mental Health Education.

The Many Dimensions of Wellbeing – Bennett Institute for Public Policy

https://www.bennettinstitute.cam.ac.uk/research/research-projects/Many-Dimensions-of-Well-being/

The *Many Dimensions of Wellbeing* project is a Cambridge University research project which advocates an transdisciplinary, bottom up and inclusive approach that addresses inconsistencies across disciplines and gains insight into the complexities of wellbeing often hidden by the tendency to study aggregate data ⁴³. Working with the anti-poverty charity, *Turn2Us*, the project, involving philosophers and economists, has designed a co-production process to gather data on wellbeing. This involved initially surveying 1500 people with lived experience of financial hardship, then holding small group interviews across a smaller working groups of stakeholders including people with lived experience, academics, and representatives from *Turn2us*⁴⁴. A third stage involved consulting on the data generated by the working group with a further twelve lived experts to develop a model of 'thriving' for Turn2us to use in its work. In the final stage of the project, a second online survey is to be conducted to solicit endorsement of an feedback on this model.

Through research that involves people with low incomes who have experienced a life changing event and are at risk of falling into poverty, this project attempts to gather a more granular understanding of wellbeing, relative to a particular context. The work aims to democratise research and measures on

wellbeing to inform both public policy and the measures used to evaluate third sector support and interventions for groups experiencing poverty. The methods used in this work challenge the standardising tendencies of existing large-scale survey research on wellbeing, and instead aim to develop a more dynamic model of thriving. While not specifically aimed at researching 'urban' wellbeing, the model is intended to be context-specific and bespoke to the communities with whom it is produced. Their account acknowledges the practical and justice-focussed means necessary for thriving, the processes in terms of activities and values which help people to discover what wellbeing means for them, and the outcomes for people from different areas, of different ages and stages of life, in terms of the currently neglected wellbeing dimensions of meaning, purpose and social connections.

Summary and further research

This briefing has outlined some of the contemporary urban challenges facing policy makers in Birmingham and the West Midlands region. It provided an overview of existing commitments to shape the economic fortunes of the city and region. While emerging commitments and existing funding priorities demonstrate a clear move in the direction of enhancing urban and community wellbeing, these would benefit from co-ordination of a holistic strategy for embedding a place-based wellbeing both across policy sectors and as a central principle to inform economic investments and development.

Identifying the complex, persistent and contextually specific nature of many of the challenges faced in Birmingham and its region, a transdisciplinary and co-produced approach was proposed as a basis for supporting innovations in the ways in which research evidence is used in strategic policy development. A number of current and recent research projects which have brought together university, municipality, practitioner, third sector partners and experts by experience were introduced. These suggest that involved, participatory and action research methodologies can lead to the development of new coalitions, novel findings, and models and frameworks for addressing wellbeing inequalities which are community-centred, and have the potential to provide insight into shaping more just urban futures. The scaling up of these kinds of projects and their applicability across a range of contexts is a key consideration. Future research would benefit from more secondary research on how community wellbeing measures have been developed, introduced and applied. Measures should be tested for validity among diverse populations, sectors and geographical areas. Closer attention needs to be paid to the consultative and co-productive processes which go into their production.

Bibliography

¹ New Policy Institute (2021) *The State of Economic Justice in Birmingham and the Black Country 2021*https://www.npi.org.uk/files/8616/1218/9653/The State of Economic Justice in Birmingham and the Black Country 2021.pdf



² Lee, S.E., Quinn, A.D., Rogers C.D.F. (2016) Advancing City Sustainability via Its Systems of Flows: The Urban Metabolism of Birmingham and Its Hinterland. *Sustainability*. 2016; 8(3):220, https://doi.org/10.3390/su8030220, p6

³ Birmingham and Solihull Local Enterprise Partnership (2016) *A Greater Birmingham for a Greater Britain. Strategic Economic Plan 2016-2030*, https://gbslep.co.uk/upload/files/NewFolder/SEP-2016-30.pdf

⁴ West Midlands Combined Authority (WMCA) (2020) *Rebuilding the West Midlands The WMCA Representation to the Comprehensive Spending Review 2020*https://www.wmca.org.uk/media/4322/rebuilding-the-west-midlands-src-csr-submission.pdf

⁵ UK Government (2021) Government to publish Levelling-Up White Paper, 4 May 2021. https://www.gov.uk/government/news/government-to-publish-levelling-up-white-paper

⁶ UK2070 Commission (2021) *Make No Little Plans. Acting at scale for a fairer and stronger future. Final Report of the UK2070 Commission*. http://uk2070.org.uk/2020/02/26/uk2070-final-report-published/ p53.

⁷ Institute for Community Studies (2021) "Why don't they ask us?" The role of communities in levelling up https://www.youngfoundation.org/wp-content/uploads/2021/07/ICS-WHY-DONT-THEY-ASK-US-compressed.pdf

⁸ Birmingham City Council (2021) *COVID-19 Economic Recovery Strategy March 2021*. Birmingham City Council, p7, https://www.birmingham.gov.uk/downloads/file/18942/economic recovery strategy 2021

⁹ Birmingham City Council (2020) Birmingham City Council Delivery Plan: 2020-2022, https://birmingham.cmis.uk.com/birmingham/Decisions/tabid/67/ctl/ViewCMIS DecisionDetails/mid/391/Id/b019e183-15e6-4990-9eec-8f437e5fdba9/Default.aspx

¹⁰ WMCA (2020) Levelling-up the West Midlands. Our roadmap to community recovery and prospectus for government. https://www.wmca.org.uk/media/4376/community-recovery-prospectus-nov-20.pdf

¹¹ Bagnall, A., South, J., Mitchell, B., Pilkington, G., Newton, R. and Salvatore, D.M., (2017). Systematic scoping review of indicators of community wellbeing in the UK. http://eprints.leedsbeckett.ac.uk/id/eprint/5238/1/community-wellbeing-indicatorsscoping-review-v1-2-aug2017.pdf

¹² Atkinson, S. (2020). The Toxic Effects of Subjective Wellbeing and Potential Tonics. *Social Science & Medicine*: https://doi.org/10.1016/j.socscimed.2020.113098.

¹³ Bagnall et al 2017

¹⁴ Centre for Thriving Places (2020); https://www.centreforthrivingplaces.org/wp-content/uploads/2020/03/TPI2020brochure.pdf; Local Trust (2019) Left behind? Understanding communities on the edge. https://localtrust.org.uk/insights/research/left-behind-understanding-communities-on-the-edge/; Hill-Dixon, A. Solley,S. Bynon, R. (2018) Being well together. The creation of the Co-op Community Wellbeing Index. The Young Foundation, The Co-op, Geolytix, https://communitywellbeing.coop.co.uk/media/1026/the-community-wellbeing-index - full report.pdf

- ¹⁵ Cloutier S., Ehlenz M.M., Afinowich R. (2019) Cultivating community wellbeing: Guiding principles for research and practice. *International Journal of Community Well-Being* 2(3):277-99.
- ¹⁶ Brown, V.A., Deane, P.M., Harris, J.A. and Russell, J.Y. (2010). *Tackling wicked problems through the transdisciplinary imagination*, Earthscan, Abingdon, p4.
- ¹⁷ Lawrence, R.J., Gatzweiler, F.W. (2017) Wanted: a transdisciplinary knowledge domain for urban health. *Journal of Urban Health* **94**, 592–596, https://doi.org/10.1007/s11524-017-0182-x
- ¹⁸ Bammer, G., Bronitt, S., Brown, L., Bursztyn, M., Maury, M., Cram, L., . . . Withers, G. (2013). *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems*. ANU Press. Retrieved July 22, 2021, from http://www.jstor.org/stable/j.ctt2jbkj5
- ¹⁹ Corcoran, R. (2020). "Urban regeneration and the mental health and wellbeing challenge: In support of evidence-based policy." *Journal of Urban Regeneration & Renewal* **13**(3): 257-269, p256; Leach, J., et al. (2010). "Sustainable Urban Environments Research Dialogues." University of Birmingham, Birmingham. See http://suedialogues.wordpress.com/reports
- ²⁰ Leach, J.M. and Rogers, C (2019) *Towards the establishment of a new transdisciplinary area of scholarship in infrastructure and cities: A literature review*https://research.birmingham.ac.uk/portal/en/publications/towards-the-establishment-of-a-new-transdisciplinary-area-of-scholarship-in-infrastructure-and-cities-a-literature-review(c8a6aed6-f8bd-498f-b003-64b34e2deb9c).html. UKCRIC, London.
- ²¹ Corcoran, R. (2020, p256). "Urban regeneration and the mental health and wellbeing challenge: In support of evidence-based policy." *Journal of Urban Regeneration & Renewal* **13**(3): 257-269; Leach, J., et al. (2010). "Sustainable Urban Environments Research Dialogues." University of Birmingham, Birmingham. See http://suedialogues.wordpress.com/reports
- ²² Wickson, A.L Carew, A.W. Russell, (2006, p1054) Transdisciplinary research: characteristics, quandaries and quality, Futures, Volume 38 Issue 9, 2006, Pages 1046-1059, https://doi.org/10.1016/j.futures.2006.02.011.
- ²³ Simon, D. and H. Palmer (2020). Comparative Urban Research From Theory To Practice: Co-Production For Sustainability, Policy Press. p 10.
- ²⁴ CityAirSim shows how traffic, vegetation and construction affect the city, https://www.mistraurbanfutures.org/sites/mistraurbanfutures.org/files/faktablad_cityairsim_eng_200214.pdf
- ²⁵ MISTRA Urban Futures; SIGURD: Sustainable Impact Governance Urban Development: https://www.mistraurbanfutures.org/en/project/sigurd-sustainable-impact-governance-urban-development-sigurd
- ²⁶ Accessible Cities: https://www.mistraurbanfutures.org/en/project/accessible-cities
- ²⁷ Mistra Urban Futures; Impact of participation https://www.mistraurbanfutures.org/en/project/impact-participation-0
- ²⁸ Perry, B. Russell B, (2020) Participatory cities from the 'outside in': the value of comparative learning; Chapter 7 Simon, D. and H. Palmer (2020). *Comparative Urban Research From Theory To Practice: Co-Production For Sustainability*, Policy Press. p 133-154 p159.
- ²⁹ Palmer, H., Polk, M., Simon, D. *et al.* Evaluative and enabling infrastructures: supporting the ability of urban co-production processes to contribute to societal change. *Urban Transform* **2**, 6 (2020). https://doi.org/10.1186/s42854-020-00010-0



rjc.org/sites/default/files/Jam%20%26%20Justice%20Final%20Report%20July%202019.pdf

- ³⁴ Hinchliffe, S., Jackson, M., Wyatt, K., Barlow, A., Barreto, M., Clare, L., Depledge, MH., Durie, R., Fleming, LE., Groom, N & Morrissey, K. (2018) Healthy publics: enabling cultures and environments for health. *Palgrave Communications*, 4(1): 1-10 DOI: https://doi.org/10.1057/s41599-018-0113-9
- ³⁵ Wyatt, K., Durie, R, Grand, A., Groom, N., Hinchcliffe, S., Jackson, M., Purtell. Wellcome Centre for Cultures and Environments of Health, ENGAGEMENT IMPLEMENTATION STRATEGY, May 2018. https://wcceh.org/wp-content/uploads/Engagement-implementation-strategy-May-2018.pdf
- ³⁶ Wellcome Centre for Cultures and Environment of Health. Beacon project: loneliness and community: https://wcceh.org/projects/beacon-loneliness-and-community/
- ³⁷ Wellcome Centre for Cultures and Environment of Health. Beacon: transforming evidence: https://wcceh.org/projects/beacon-transforming-evidence/
- ³⁸ Wellcome Centre for Cultures and Environment of Health. Beacon: healthy Relationships: https://wcceh.org/themes/transforming-relations/beacon-healthy-relationships/
- ³⁹ Wellcome Centre for Cultures and Environment of Health. Beacon project: transforming engagement: https://wcceh.org/projects/transforming-engagement-2/
- ⁴⁰ Thomas, F., Hansford, L., Wyatt, K., & the DeStress team (2020) Pp. 116 An engaged approach to exploring issues around poverty and mental health: a reflective evaluation of the research process from researchers and community partners involved in the DeStress study. *Health Expectations*, https://doi.org/10.1111/hex.13065
- ⁴¹ Thomas et al (2020)
- ⁴² TRIUMPH, Involving Young People in Research Funding Decision Making, briefing. (December, 2020) Available online: http://triumph.sphsu.gla.ac.uk/wp-content/uploads/2020/12/Involving-young-people-in-research-December-2020.pdf
- ⁴³ Fabian, M. (2020) Improving Interdisciplinary Research in Well-Being—A Review with Further Comments of Michael Bishop's The Good Life: Unifying the Philosophy and Psychology of Well-Being. *Journal of Happiness Studies*. https://doi.org/10.1007/s10902-020-00333-6
- ⁴⁴ Fabian, M., Agarwala, M. Podcast. Bennett Institute for Public Policy, Wellbeing: Measuring what matters to people. https://www.bennettinstitute.cam.ac.uk/research/research-projects/Many-Dimensions-of-Wellbeing/

³⁰ Perry, B., Durose, C. and Richardson, L. with the Action Research Collective (2019) How can we govern cities differently? The promise and practices of co-production. Greater Manchester, Creative Concern, p. 3, https://jamandjustice-

³¹ Perry et al (2019), p3

³² Perry et al (2019), p16-31

³³ Perry et al (2019), p42