

Tackling root causes upstream of unhealthy urban development (TRUUD)

NCD Prevention in Cities

Working with researchers to implement evidence-based interventions for urban public health

Global Alliance for Chronic Diseases (GACD) Annual Scientific Meeting
7th Dec 2022, Hilton Wembley, London

Daniel Black

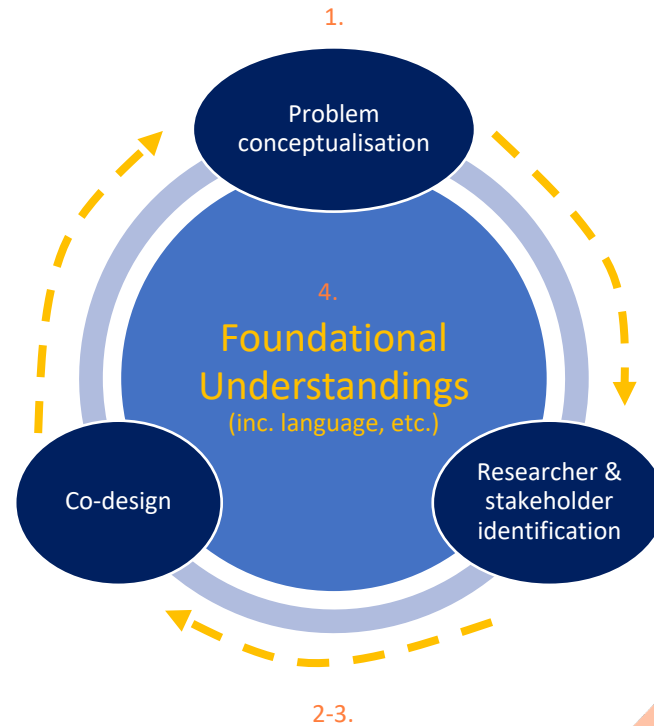
Programme Director, TRUUD
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1. **Objectives, methods, and prelim. outcomes**
2. **Communities, policy-makers and practitioners**
(recruitment / co-design)
3. **Researching across disciplines (ID/TD)**
4. **Facilitators and challenges**



UK Prevention Research Partnership

is a £50 million multi-funder initiative that supports novel research into the primary prevention of non-communicable diseases to improve population health and reduce health inequalities.



Call criteria:

- “New approaches to population health research” (going beyond ‘traditional’)
- Whole systems
- Interdisciplinary
- Multiple ‘upstream’ actions
- Co-creation with end users
- ‘Knowledge brokers’ key
- Solutions/societal impact (changes in policy and practice)



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Language, definitions and shared understandings:

Plural understandings – e.g...

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What do we mean by 'health'?

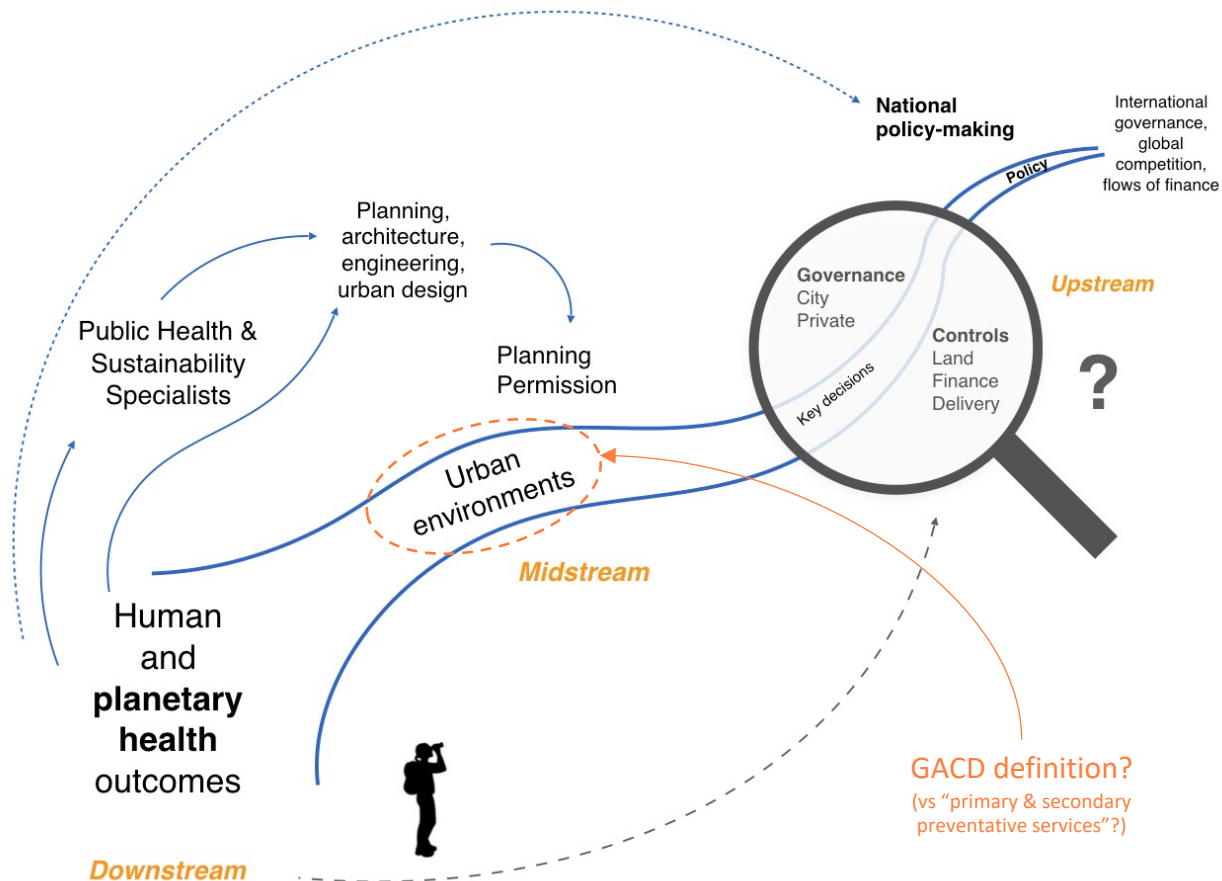
Healthcare	< >	Public Health
Individual	< >	Population
General	< >	Inequalities
Biomedical	< >	Wellbeing
Physical	< >	Mental
Opportunities	< >	Outcomes
Right to	< >	No right to
Human	< >	Planetary

Coggon J et al. (2022) Early conceptualisation work: 8 'dimensions' of health? [Unpublished]

Numerous language issues (even those for whom it's a first language)

- Interdisciplinary / transdisciplinary (ID/TD)
- Co-production (co-design? co-create?)
- Impact
- Knowledge broker
- Etc.

What do we mean by 'upstream'?




TRUUD ‘grand mission’: Enable a paradigm shift in how health is valued and integrated at root-cause decision-making points in the urban planning and development sectors

Mechanism (how): By developing and testing a multi-action intervention in two main sub-sectors: transport and property

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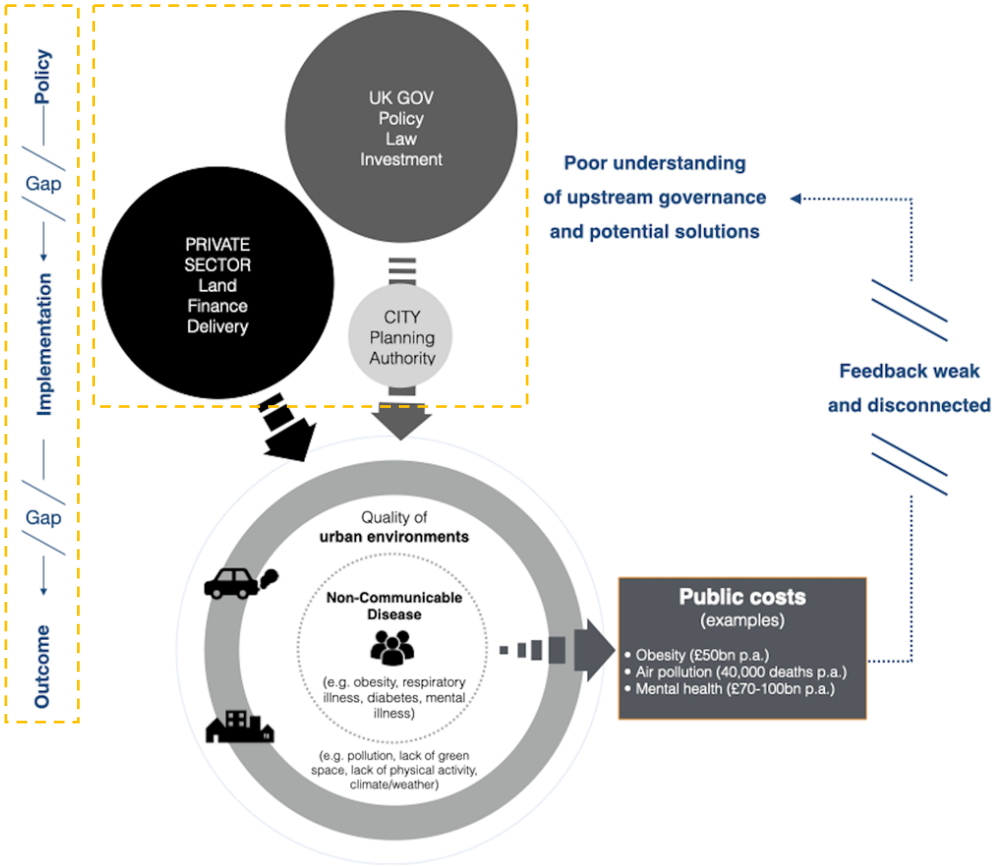
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PREVENTING DISEASE

TRUUD aims to change the way decisions are made about urban development to prevent non-communicable diseases (NCDs) in the future.

[Learn more](#)

www.truud.ac.uk



Black D et al (2022) Study Protocol | Tackling Root Causes Upstream of Unhealthy Urban Development (TRUUD): Protocol of a five-year prevention research consortium. Wellcome Open Access. <https://wellcomeopenresearch.org/articles/6-30>

Phase 1: Methods, findings

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Methods

Interviews

- 30 pilot interviews
- 127 interviews
- Purposive, snow-ball sampling (Phase 1)
- Large-group TD design and analysis

Workshops (x4 in Phase 1)

- Participatory mapping
- Causal loop diagrams

Economic valuation (environmental, health)

- Systematic reviews (urban-health evidence)
- Agent-based modelling
- GIS/Quality Outcomes Framework
- Database/tool development
- Testing and refining on case study projects

Intervention identification

- MRC Complex Intervention Framework
- Bespoke TRUUD Template
- Iterative, participatory selection

Phase II

- Emergent (participatory co-design)

Identified problem areas

National Govt: e.g.

Lack of: integration (health compartmentalised), comparable evidence, funding/long-term thinking/investment

Local Govt: e.g.

Resource, agency, lack of evidence

Private sector: e.g.

Dominant property delivery models, investment risk appetite, lack of incentives, short-termism

Third: e.g.

Land control/value, 'hope value', tax arrangements

Law: e.g.

Power asymmetry, resultant risk aversion, siloed legislation, systemic inertia

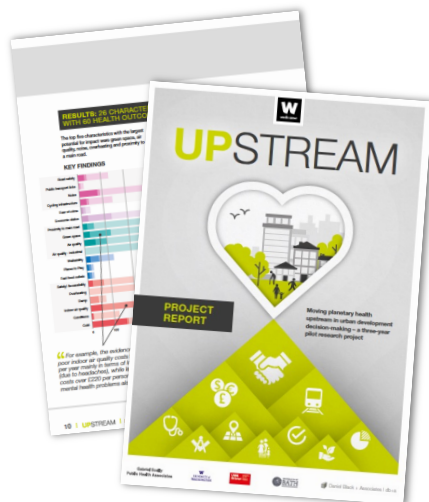
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Areas of potential intervention identified

8 INTERVENTION AREAS TAKEN FORWARD

1. Corporate decision-making
2. Real estate investment
3. National govt
4. Design coding (PhD)
5. City-region transport KPIs
6. Large-scale property / local plans
7. Law (legal capacity)
8. Public engagement (digital tools)

Engaging policy-makers & practitioners



The Royal Society of Medicine

Building health into the urban environment: Evidence and opportunities



Sir Malcolm Grant

Founding Chair, NHS England (2011-2018);
Chancellor, University of York



Andy Burnham

Mayor of Manchester



Paul Smith

Cabinet Member for Housing, Bristol City Council



Richard Meier

Former Partner, Argent LLP
Vice-chair of Urban Land Institute UK



Victoria Hills

Chief Executive, Royal Town Planning Institute



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Policy-makers & practitioners: Very large network of agents, tiers, heterogeneous sub-sectors...and these just the 'tip of the iceberg'

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(Chair)
Director of Strategy
West Midlands Combined
Authority
[Read more >](#)



Stephen Aldridge
Director for Analysis &
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Chief Development Officer
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INDUSTRY MEMBERSHIP / THIRD SECTOR



LOCAL GOVERNMENT



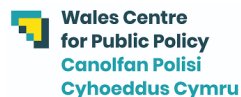
INDUSTRY (developers, architect)



NATIONAL GOVERNMENT



DEVOLVED / REGIONAL GOVERNMENT

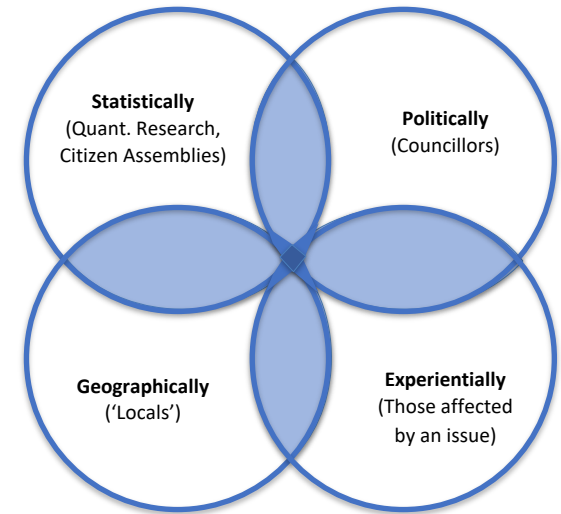
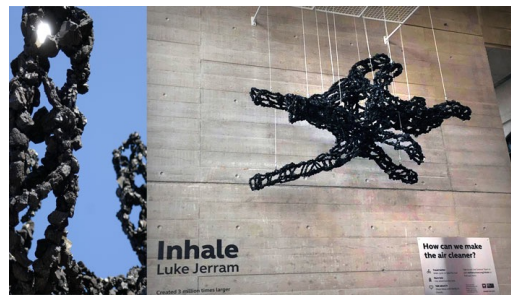


ACADEMIC



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Community engagement



Aim: to 'transcend' existing consultation practice in urban development

Initial community representatives leading to.....



Public Advisory Group (x6)



Gibson A, Britten N, Lynch, J (2012) *Theoretical directions for an emancipatory concept of patient and public involvement*. Health. Sage.

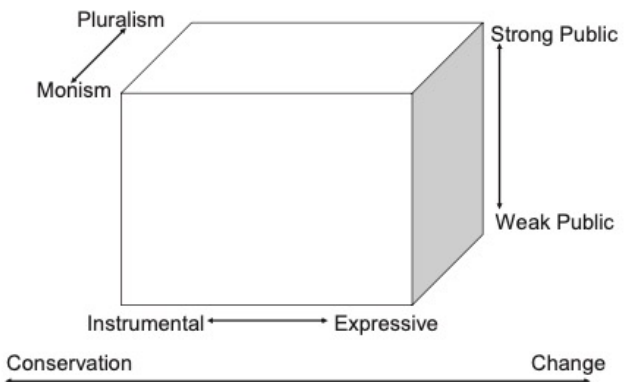


Figure 1. A four dimensional view of knowledge spaces

Bringing together researchers from different disciplines (ID/TD)

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First bit easy...

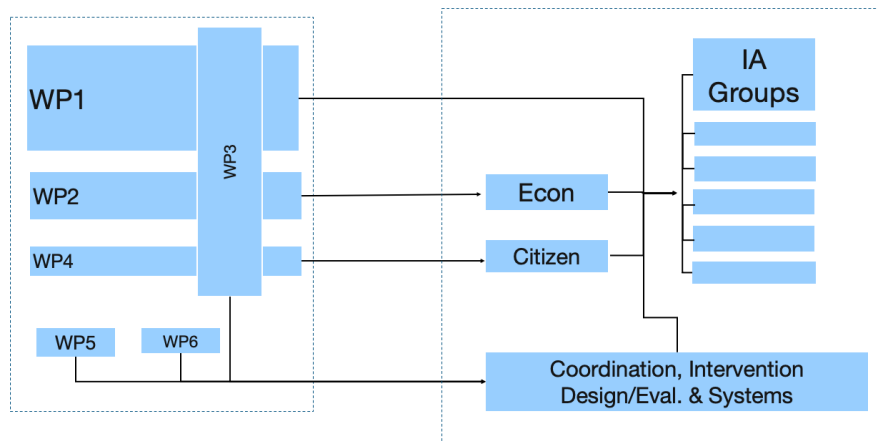
Group description	Disciplines (newly combined)
<ul style="list-style-type: none"> 40-odd researchers 5 HE institutions Multiple cost centres 2 city / city regions National / Westminster 100s of stakeholders £10m research funding 	<ul style="list-style-type: none"> Public health Urban planning Policy studies Organisation studies Management Real estate investment Law Environmental economics Health economics Systems engineering Urban design Spatial planning Psychology Public engagement Etc

Herding cats

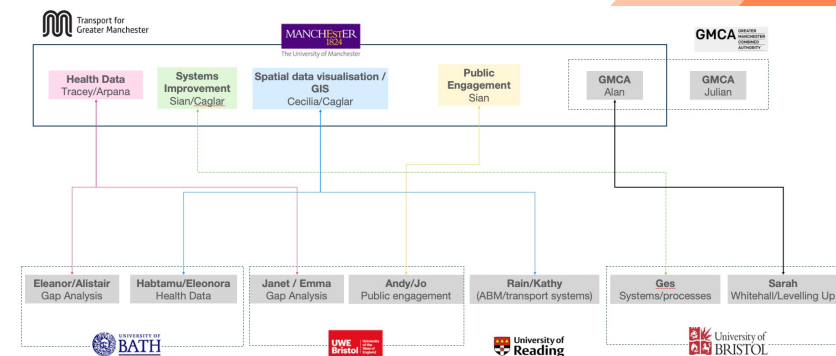


Phase I

Re-structuring for Phase II



Example integration – Greater Manchester

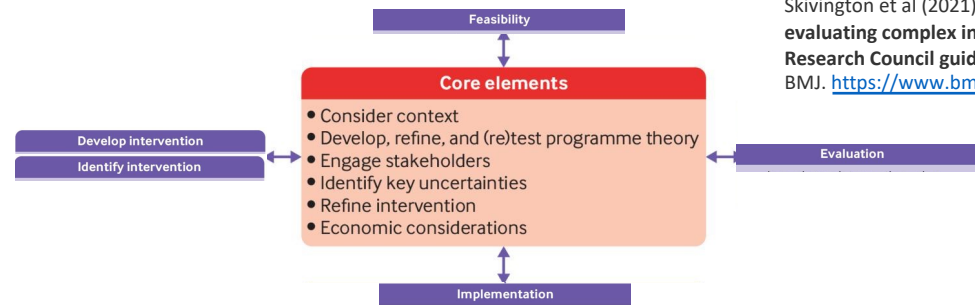


Complex, real-world problems & foundational understandings (some best practice guidance)

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- “not constrained by an unduly limited set of perspectives and approaches (and which include) methods and perspectives where experience is still quite limited” (*Skivington et al, 2022*)



Skivington et al (2021) **A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance.** *Research Methods and Reporting.* BMJ. <https://www.bmj.com/content/374/bmj.n2061>

- “so far there is only limited understanding of the enabling conditions, challenges, lessons, and tools for inter-disciplinary research...increasing our understanding of how to effectively design and deliver interdisciplinary research is crucial...” (*Brown R, 2019*)



Brown et al (2019) **Interdisciplinary Research and Impact.** Wiley. *Global Challenges.* <https://onlinelibrary.wiley.com/toc/20566646/2019/3/4>

Black et al (2019) **Moving Health Upstream in Urban Development: Reflections on the Operationalization of a Transdisciplinary Case Study.** Wiley. *Global Challenges.* <https://onlinelibrary.wiley.com/doi/full/10.1002/gch2.201700103>

- “despite its promise and many excellent individual examples, most interdisciplinary research remains at the academic margins, largely because understanding about such investigations is fragmented” (*Bammer G, 2013*)



Bammer G (2013) **Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems.** ANU Press. <https://press.anu.edu.au/publications/disciplining-interdisciplinarity>



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TRUUD's critical reflection

10 'bespoke' criteria

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Black D, Bates G, Ayres S, Bondy K, Callway R, Carhart N, Coggon J, Gibson A, Hunt A (2022) **Operationalising a large research programme tackling complex urban and planetary health problems: a case study approach to critical reflection.** Sustainability Science. [Under Review]

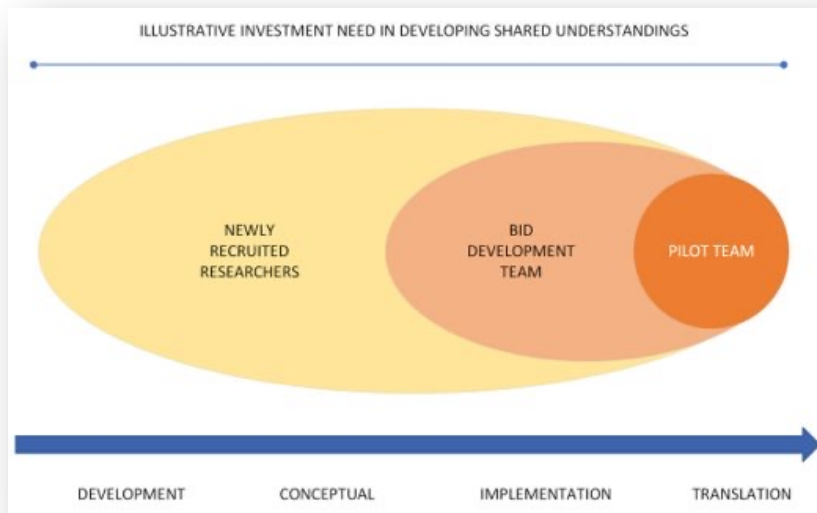
FOUNDATIONAL UNDERSTANDINGS

1. Systems, Unknowns, and Imperfection
2. ID/TD Understandings
3. Context and Stakeholder Knowledge
4. Identifying and responding to values
5. Societal Impact

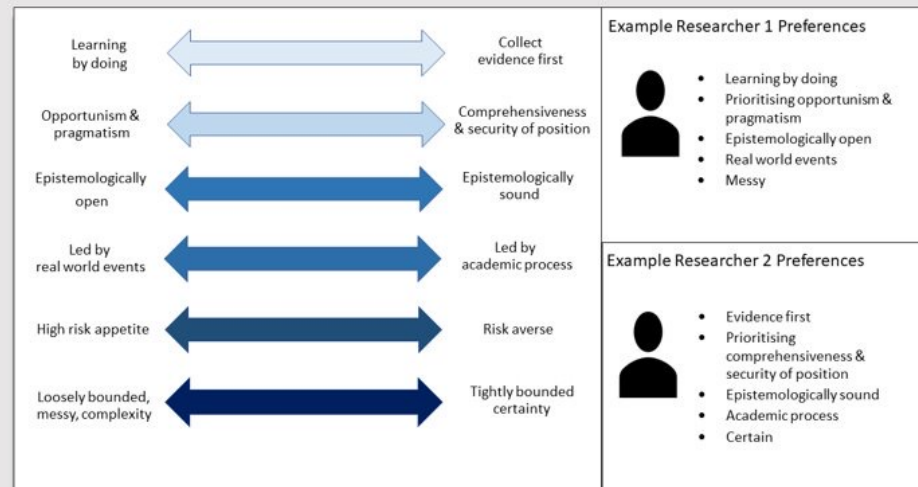
OPERATIONAL UNDERSTANDINGS

1. Project Understandings and Direction
2. Team Cohesion
3. Communications
4. Decision-making
5. Methods Development

Team learning changes over time...



Different researchers & disciplines work in different ways...



Acknowledgements

This work was supported by the UK Prevention Research Partnership, an initiative funded by UK Research and Innovation Councils, the Department of Health and Social Care (England) and the UK devolved administrations, and leading health research charities.

Weblink: <https://mrc.ukri.org/research/initiatives/prevention-research/ukprp/>

