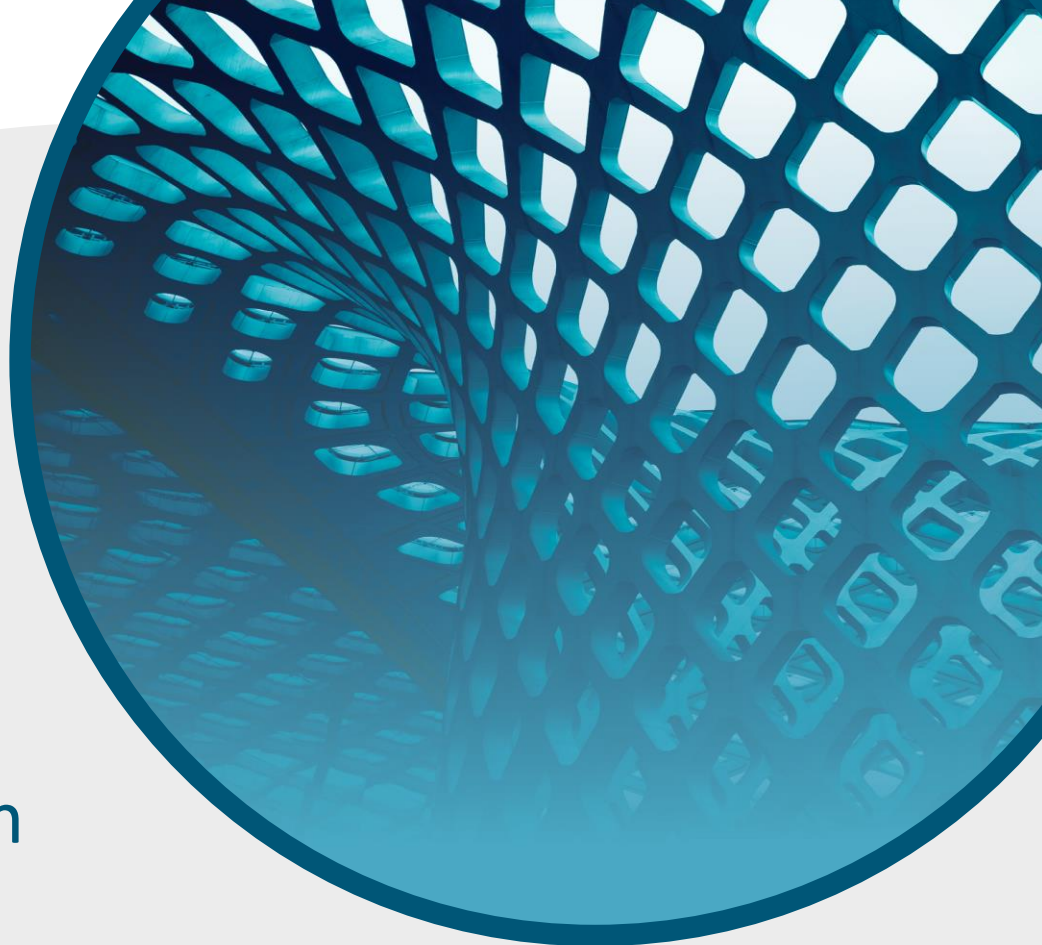




A primer on using QCA in evaluation

Brad Astbury



Overview



What is QCA?



Case illustration



Key steps and procedures

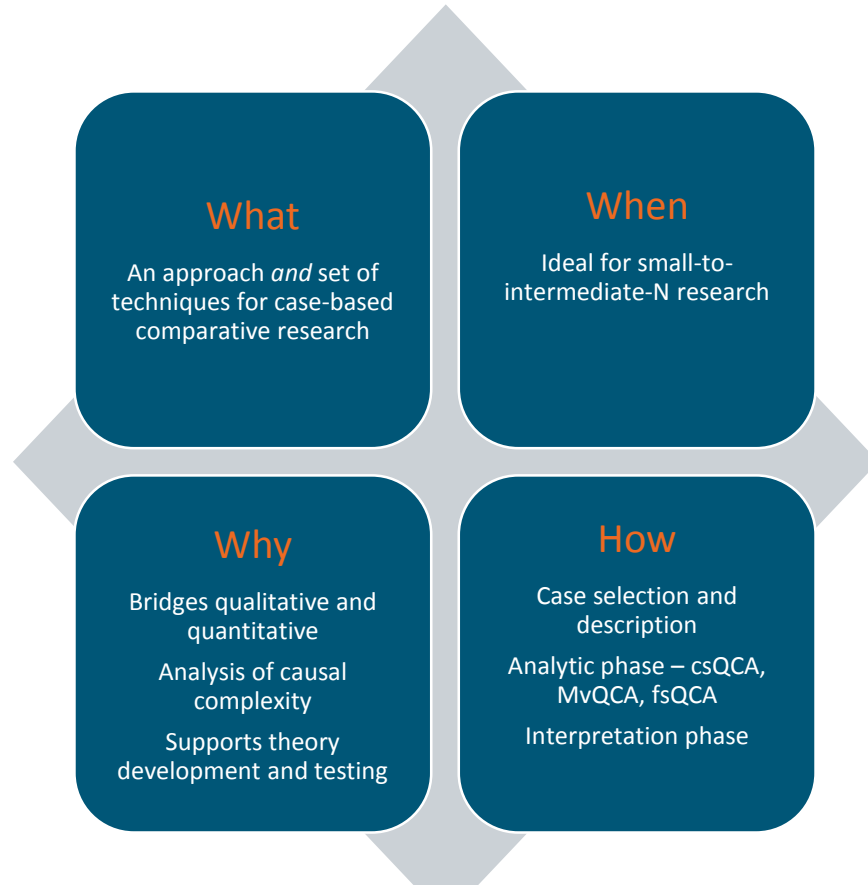


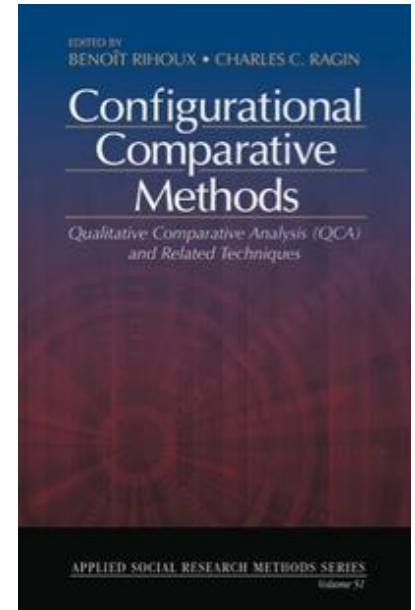
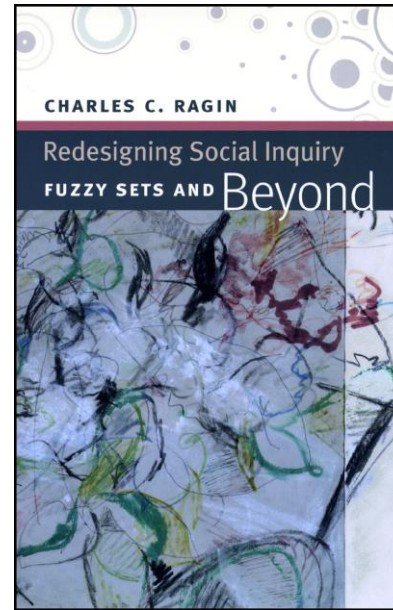
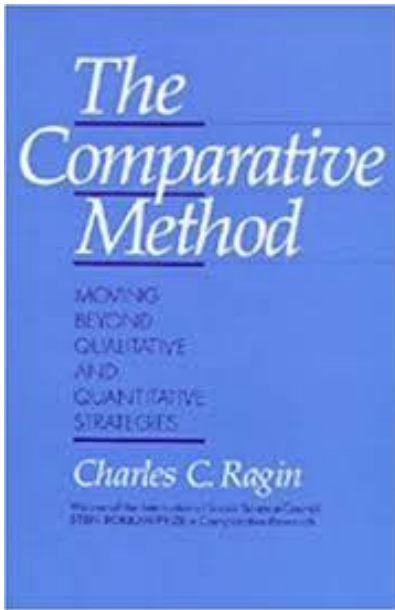
Benefits and challenges



Questions

QCA in a nutshell





<http://compasss.org/>

QCA in the context of a larger study

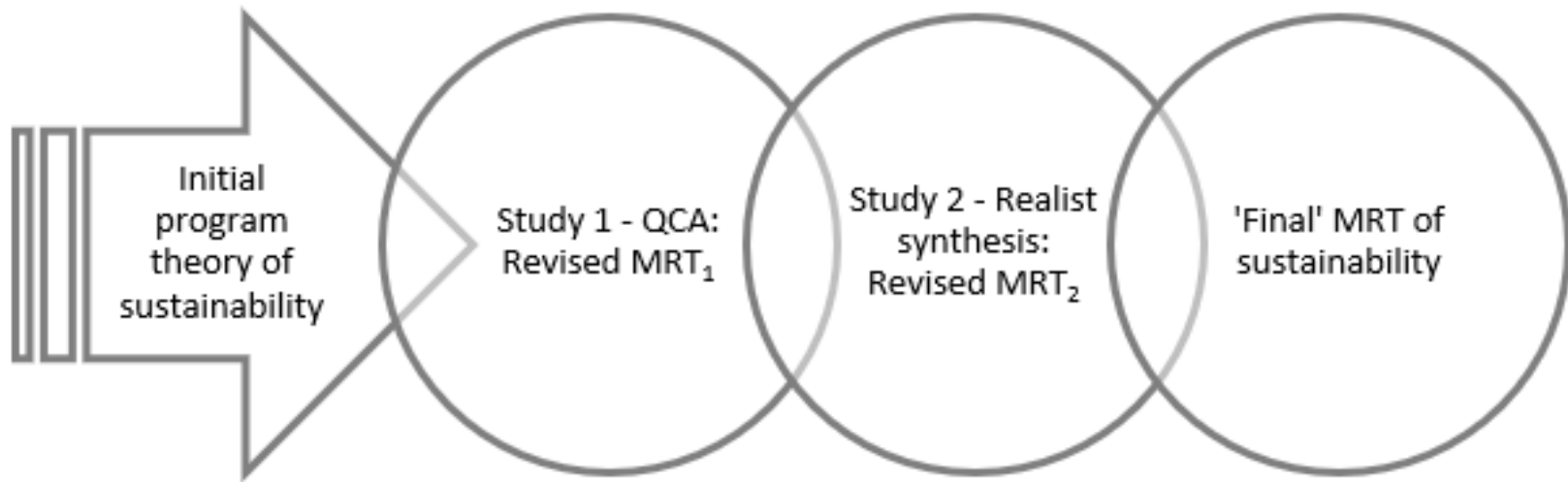


Figure 3 Sequential-explanatory design for developing, testing and refining a MRT of sustainability

Sustainability of Health Promotion Programs

CAFÉ MEALS FOR PEOPLE FACING DISADVANTAGE

Wednesday 13 February 2019



For 15 years Café Meals has been helping people who are experiencing homelessness or unable to cook at home visit local cafes and buy healthy meals.

"A lot of people who don't have a kitchen, or don't have regular access to food, have that anxiety of 'Where am I going to get food tomorrow? How much money have I got left? How am I going to manage all this?'" says Dietician and Café Meals Coordinator Katrina Doljanin.

Participants can visit selected cafes and restaurants once a day during opening hours and buy a meal up to \$12 in value for just \$3.

Food for All?

Food Insecurity Community Demonstration Projects
Maribyrnong City Council and North Yarra Community Health
Case Studies



www.vichealth.vic.gov.au

 VicHealth

WALK TO
SCHOOL

 an initiative of
VicHealth™

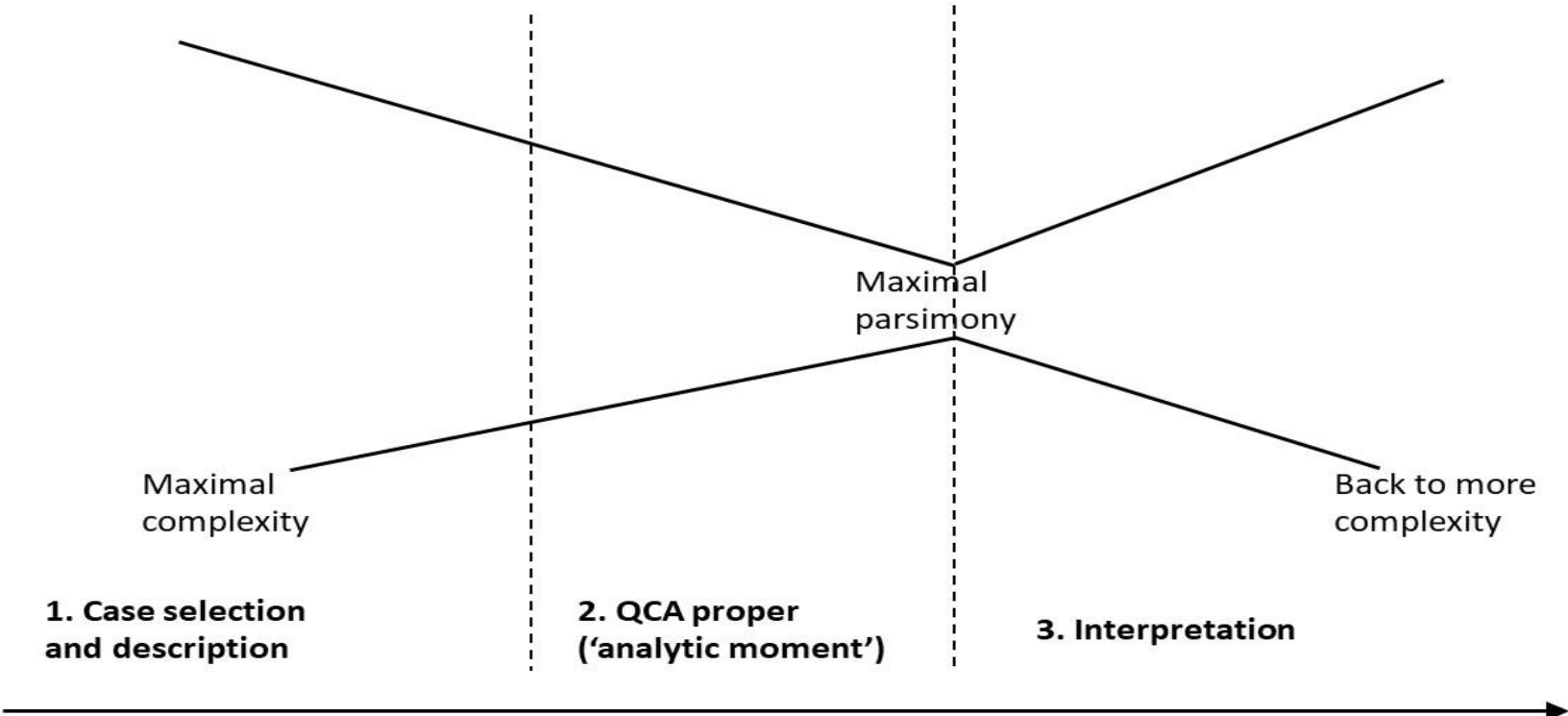
Get involved with Walk to School 2019
this October and help kids build
healthy habits for life.

 VicHealth®

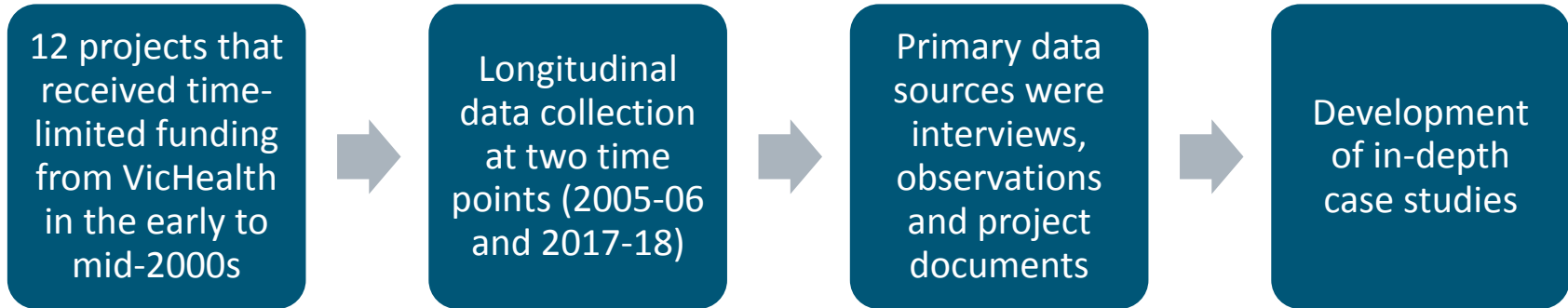
Theoretical knowledge



Case knowledge



Case selection and description



Analytic phase

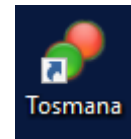
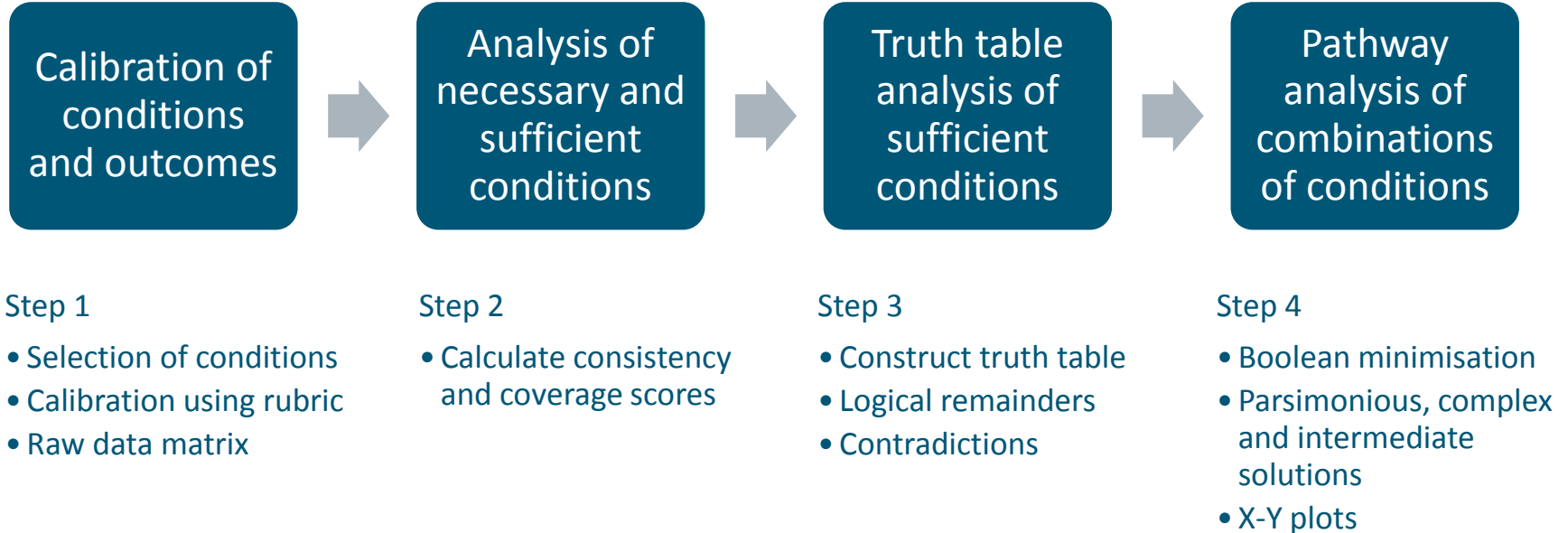


Table 5 Criteria for evaluating degree of membership in each condition

Degree of membership	Score	Conceptualisation	Implementation	Support	Integration	Effectiveness	Funding	Sustainability
Full inclusion in the set of projects meeting the condition	1	Project responds to a clearly identified need; design is based on a robust theory of change	The project was implemented successfully; no major constraints	Strong support for the project from within and outside the organisation	The project was incorporated into organisational processes and policies	Strong documented evidence of project effectiveness	Availability of <u>sufficient</u> and continuing resources	Most dimensions of sustainability are present (5-6 indicators)
More in than out	0.67	Project responds to an identified need; design is based on a theory of change	The project was implemented well; some constraints not addressed	Moderate support for the project from within and outside the organisation	The project was mostly incorporated into organisational processes and policies	Moderate documented evidence of project effectiveness	Availability of some continuing resources	Some dimensions of sustainability are present (3-4 indicators)
More out than in	0.33	Project responds to a need; some aspects of the design are based on a theory of change	The project was implemented; many constraints not addressed	Some support for the project from within and outside the organisation	The project was partially incorporated into organisational processes and policies	Some documented evidence of project effectiveness	Inconsistent resource availability	A few dimensions of sustainability are present (1-2 indicators)
Full exclusion from the set of projects meeting the condition	0	Project does not respond to an identified need; theory of change is unclear	The project was implemented poorly; major constraints not addressed	Little support for the project from within and outside the organisation	The project was not incorporated into organisational processes and policies	Little documented evidence of project effectiveness	No continuing resources available	No dimensions of sustainability are present (0 indicators)

Table 6 Data matrix of outcome, conditions and fuzzy-set membership scores

Case ^a	C1 ^b	C2	C3	C4	C5	C6	Sustainability
1	0.67	0.67	0.67	0.67	0.33	0.33	0.67
2	0.33	0.33	0.33	0.33	0.33	0	0
3	0.67	0.67	0.33	0.33	0.33	0	0.33
4	0.67	0.67	0.33	0.33	0.33	0.67	0.67
5	0.67	0.33	0.67	0	0.33	0	0.33
6	0.67	0.67	0.33	0	0.33	0.67	0.67
7	0	0	0.33	0	0.33	0	0
8	0.67	0.67	0.67	0.33	0.33	0	0.33
9	0.33	0.33	0.67	0	0.33	1	0.67
10	0.33	0.33	0.67	0.33	0.33	1	0.67
11	1	1	1	1	0.67	1	1
12	0.67	0.67	0.67	0	0.67	0	0

^a Please refer to Table 4 for the corresponding project title for each case identification number. For example, Case 1= Asset-based community development; Case 2= Active Plus.

^b C1 = Conceptualisation, C2= Implementation, C3= Support, C4= Integration, C5= Effectiveness, C6=Funding

Table 7 Analysis of necessary conditions

Condition	Consistency	Coverage
Conceptualisation	0.88	0.75
Implementation	0.88	0.79
Support	0.88	0.75
Integration	0.59	1
Effectiveness	0.64	0.78
Funding	0.7	0.86
<u>Concept+Implementation+Support</u>	1	0.74

+: Indicates the presence of either condition or all conditions.

Table 8 Truth table for the analysis of sufficient conditions for sustainability

Row	<u>Condition^a</u>						No	Outcome	<u>Consistency^b</u>		Case(s) ^c	
	C1	C2	C3	C4	C5	C6			Raw	PRI		
1	1	1	0	0	0	1	2	1	1	1	4,6	
2	0	0	1	0	0	1	2	1	1	1	9,10	
3	1	1	1	1	0	0	1	1	1	1	1	
4	1	1	1	1	1	1	1	1	1	1	11	
5	1	1	0	0	0	0	1	0	0.78	0	3	
6	1	0	1	0	0	0	1	0	0.78	0	5	
7	1	1	1	0	0	0	1	0	0.78	0	8	
8	1	1	1	0	1	0	1	0	0.78	0	12	
9	0	0	0	0	0	0	2	0	0.63	0	2,7	
10-64	Logical remainders											?

^a C1 = Conceptualisation, C2= Implementation, C3= Support, C4= Integration, C5= Effectiveness, C6=Funding

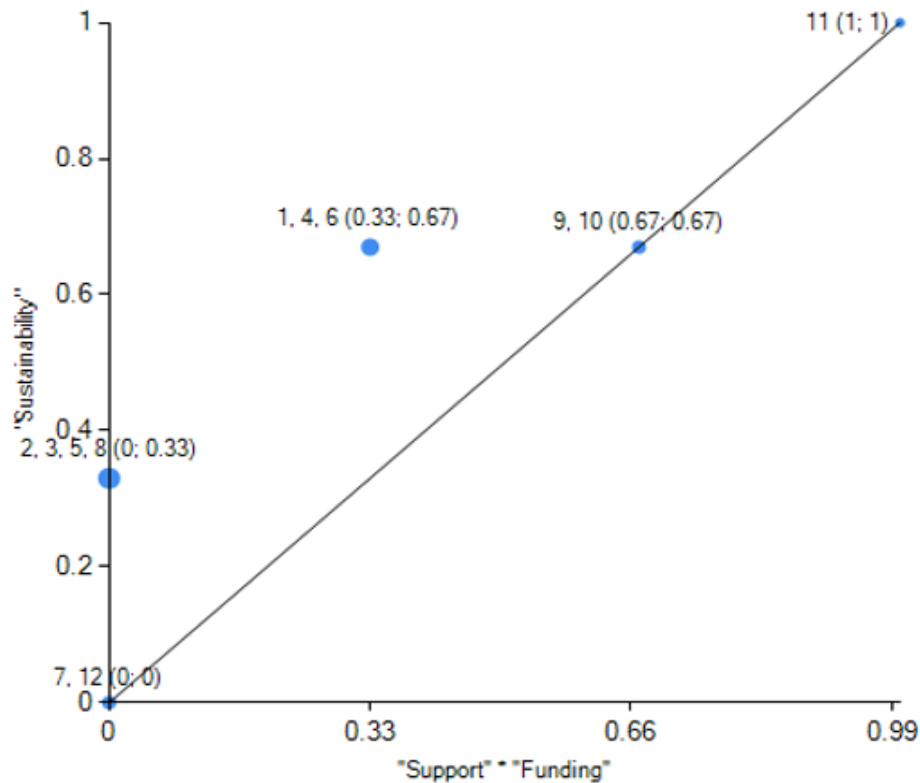
^b The raw and proportional reduction in inconsistency (PRI) scores are 'measures of fit' that compute the degree, between 0 and 1, that a proposition about the sufficiency/necessity of a condition for an outcome is supported by the evidence.

^c Please refer to Table 4 for the corresponding project title for each case identification number. For example, Case 1= Asset-based community development; Case 2= Active Plus.

Table 9 Different pathways to sustainability

	1 Institutional Support Pathway	2 Autonomy Pathway	3 Integration Pathway
Conceptualisation (C1)		●	●
Implementation (C2)		●	●
Support (C3)	●		●
Integration (C4)			●
Effectiveness (C5)			
Funding (C6)	●	●	
Cases	11,9,10	4,6,11	1,11
Raw coverage	0.59	0.59	0.59
Unique coverage	0.12	0.12	0.23
Solution consistency	1.00		
Solution coverage	0.94		

Note: ● = causal condition (present)



Set-theoretic consistency ($X \leq Y$): 1.0000
 Set-theoretic coverage ($X \leq Y$): 0.5873

Figure 6 Plot of membership in sustainability against membership in the institutional support pathway

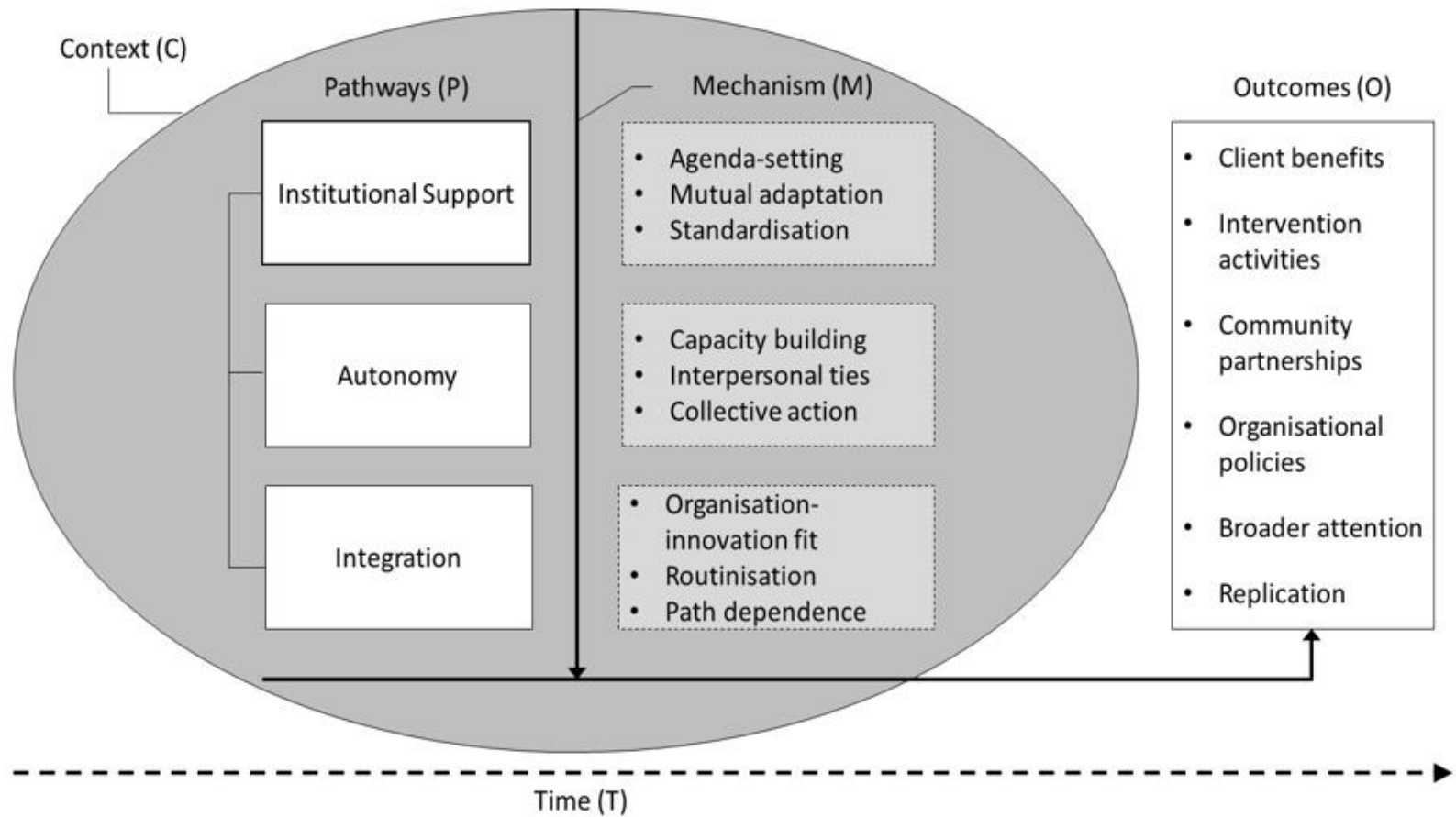


Figure 20 'Final' middle-range theory of sustainability

Advantages for evaluators



Challenges to consider



Questions?



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