Building trust in participative groups accompanying river restoration projects: a pre-/post observation analysis

3th International Conference on Public Policy Singapore

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June 29, 2017



Participation in river restoration projects

- ▷ River restoration projects: flood prevention, recreation, nature conservation
- ▷ Large scale infrastructure projects that affect many different stakeholder, particularly also private property
- Participation (advisory groups) should, among other things, foster "trust in institutions", i.e. the cantonal and municipal authorities



Pre- and post-observation in five advisory groups

- Standardized questionnaire to five distinct advisory groups of five different river restoration projects (2011)
- ▷ approx. 130 questionnaires returned
- ▷ repeated observation (two questionnaires from the "pre" and the "post" round for just only 28 individuals
- ▷ Processes have been ongoing, time-span between observations between 6 and 12 months (meetings took place in between).

Menzel et al. (2013)

Building trust in advisory groups

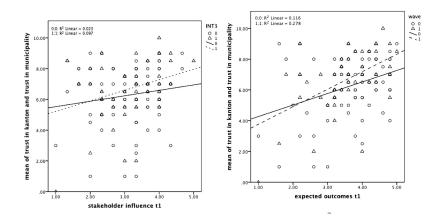
- ▷ Stakeholder Influence: do participants perceive themselves as influential?
- \triangleright Process Quality
 - ▷ Appreciation/Efficiency: do participants perceive that their effort is appreciated or do they think the process is a waste of time?
 - Transparency/Fairness: do participants perceive decision-making/the process as transparent or do they suspect that some participants are more influential than others?
- ▷ Expected Outcome: do participants anticipate an implementable plan or a bogus compromise?
- ▷ Generalized Trust: do participants generally trust other people?

Menzel et al. (2013)

Observations over time: levels or changes?

- ▷ The main research question is whether trust had been built in these processes
- \triangleright Hence, changes should be looked at
- \triangleright However:
 - ▷ At the beginning of the process, the conditions might represent prejudgements rather than experiences
 - ▷ Observations at T2 are much more reliable?
- $\,\vartriangleright\,$ Note that generalized trust does not change

Correlation



Menzel et al. (2013)

Expectations (Complex Causality?)

▷ Is stakeholder influence really that important?

- \triangleright Most people do not really want to decide
- Trust might still be high/raise if stakeholder influence is lacking as long as other characteristics of the process are given?
- Anticipation of result and/or generalized trust are expected to be more important than transparency/fairness & appreciation/efficiency, probably also as substitutes for stakeholder influence.

Menzel et al. (2013)

Fuzzy Set QCA: T2-T2

Appreciation/Efficiency	•			
Anticipation of result		•		
Generalized trust			•	
Transparency/Fairness				٠
Influence				•
Consistency	0.93	0.89	0.88	0.91
Raw coverage	0.54	0.67	0.79	0.48
Unique coverage	0.02	0.11	0.07	0.01
cases	13 ₃ ;	23 ₅ ;	11 ₃ ;	8 ₂ ;
	41;	11;	20 ₅ ;	184;
	22 ₅ ;	4 ₁ ;	71;	2 ₁ ,
	51;	20 5 ;	10 ₃ ;	6 ₁ ,
	3 ₁ ,	71;	225;	12 3 ;
	24 5 ;	5 1 ;	5 ₁ ;	3 1 ,
	16 4 ,	2 ₂ ,	18 4 ;	24 5 ;
	19 ₅ ,	6 ₁ ,	2 ₁ ,	16 4 ,
	21 5	12 3 ;	6 1 ,	19 ₅ ,
		164,	12 ₃ ;	215
		19 ₅ ,	3 ₁ ,	
		21 5	24 ₅ ;	
			16 ₄ ,	
			19 ₅ ,	
			215	

Fuzzy Set QCA: Change-T2

Appreciation/Efficiency	•			
Anticipation of result		•		
Generalized trust			•	
Influence				•
Consistency	0.75	0.73	0.63	0.62
Raw coverage	0.54	0.69	0.70	0.72
Unique coverage	0.00	0.08	0.00	0.07
cases	13 ₃ ;	235;	113;	15 3 ,
	41;	11;	205;	265;
	22 ₅ ;	41;	71;	41;
	51;	20 ₅ ;	10 ₃ ;	8 ₂ ;
	3 ₁ ,	71;	22 5 ;	10 ₃ ;
	24 5 ;	51;	51;	225;
	16 4 ,	2 ₁ ,	184;	5 ₁ ;
	19 ₅ ,	6 ₁ ,	2 ₁ ,	184;
	215	12 ₃ ;	6 1 ,	2 ₁ ,
		164,	12 ₃ ;	6 1 ,
		19 5 ,	3 1 ,	12 3 ;
		21 5	24 5 ;	3 ₁ ,
			164,	24 5 ;
			19 ₅ ,	164,
			21 5	19 ₅ ,
				215

Fuzzy Set QCA: Change-Change

Δ Appreciation/Efficiency	٠		•	•		
Δ Transparency/Fairness		•		٠		
Δ Anticipation of result					•	•
Generalized trust	٠	٠				Θ
Δ Influence			٠		Θ	
Consistency Raw coverage Unique coverage	0.83 0.50 0.05	0.91 0.34 0.02	0.98 0.29 0.10	0.92 0.30 0.05	0.79 0.48 0.05	0.80 0.26 0.05
cases	19 ₅ ; 20 ₅ , 21 ₅ ; 7 ₁ ; 5 ₁	12 ₃ ; 6 ₁ , 16 ₄ ; 7 ₁	255, 265; 51	1 ₁ ; 17 ₄ ; 7 ₁	14 ₃ , 23 ₅ ; 17 ₄ ; 20 ₅ , 21 ₅ ; 6 ₁ , 16 ₄ ; 7 ₁	14 ₃ , 23 ₅ ; 17 ₄

tQCA: Sequences of conditions

- $\,\vartriangleright\,$ tQCA is meant to take into account sequences of conditions.
- ▷ With many conditions, all possible sequence combinations render the model too complex.
- Possibly some conditions can be argued to be "temporally fixed" (they always occur at the beginning or in the end).
- ▷ Ideally just only two conditions remain of which the one could occure before the other or vice versa.

Caren and Panofsky (2005), Ragin and Strand (2008)

Does it matter whether efficiency is perceived before transparency?

- ▷ Efficiency is expected from the beginning. If it can only be perceived later in the process, this might already have harmed trust in institution.
- ▷ Transparency is more difficult to find out about and maybe first was suspected to be absent. But this may be less harmful if it can eventually be reassured.

Has APPEFF occured before TRAFAIR?

AP	PEFF	TR	AFAIR	
0	0	0	0	no
0	1	0	0	yes
0	0	1	0	no
0	0	0	1	no
0	1	1	0	no
0	1	1	1	no
0	1	0	1	no
0	0	1	1	no
1	0	0	0	yes
1	0	1	0	no
1	0	0	1	yes
1	0	1	1	no
1	1	0	0	yes
1	1	0	1	yes
1	1	1	0	no
1	1	1	1	no

Crisp Set tQCA: Change-T2

Raw coverage 0.17 0.17 0.25 0.08 0	Transparency/Fairness •						
Anticipation of result • <td>Anticipation of result\bullet<td>Appreciation/Efficiency</td><td>•</td><td>• 6</td><td>•</td><td>٠</td><td>Θ</td></td>	Anticipation of result \bullet <td>Appreciation/Efficiency</td> <td>•</td> <td>• 6</td> <td>•</td> <td>٠</td> <td>Θ</td>	Appreciation/Efficiency	•	• 6	•	٠	Θ
Generalized trust •	Generalized trust •	Transparency/Fairness	•	•	•	٠	•
Influence	Influence Apprec./Effic. before Transp./Fairness 	Anticipation of result			•	•	\ominus
Apprec./Effic. before Transp./Fairness O I Consistency 1 1 0.60 1.00 1 Raw coverage 0.17 0.17 0.25 0.08 0	Apprec./Effic. before Transp./Fairness O I Consistency Raw coverage 1 1 0.60 1.00 1.00 Unique coverage 0.17 0.17 0.25 0.08 0.17 cases 205 1 41 265 82 184 235 71 51 265 82	Generalized trust	•	•	•	\ominus	٠
Consistency 1 1 0.60 1.00 1 Raw coverage 0.17 0.17 0.25 0.08 0	$ \begin{array}{c} \text{Consistency} \\ \text{Raw coverage} \\ \text{Unique coverage} \\ \text{cases} \\ \end{array} \begin{array}{c} 1 & 1 & 0.60 & 1.00 & 1.00 \\ 0.17 & 0.17 & 0.25 & 0.08 & 0.17 \\ 0.17 & 0.17 & 0.25 & 0.08 & 0.17 \\ 0.25 & 0.08 & 0.17 \\ 0.25 & 0.08 & 0.17 \\ 0.17 & 0.17 & 0.25 & 0.08 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 & 0.17 & 0.17 \\ 0.17 & 0.17 \\ 0.17 & 0.1$	Influence	\in) (•	•	٠
Raw coverage 0.17 0.17 0.25 0.08 0	Raw coverage 0.17 0.17 0.17 0.25 0.08 0.17 Unique coverage 0.17 0.17 0.17 0.25 0.08 0.17 cases 205 1 4 265 82 235 7 5 184	Apprec./Effic. before Transp./Fairness		\in	•)	
	Unique coverage 0.17 0.17 0.25 0.08 0.17 cases 205 11 41 265 82 235 71 51 184	Consistency	1	. 1	0.6	0 1.00	1.00
Unique coverage 0.17 0.17 0.25 0.08 0	cases $\begin{array}{c} 20_5 & 1_1 & 4_1 & 26_5 & 8_2 \\ 23_5 & 7_1 & 5_1 & & 18_4 \end{array}$	Raw coverage	0.3	17 0.1	L7 0.2	5 0.08	0.17
	$23_5 7_1 5_1 18_4$	Unique coverage	0.3	17 0.1	L7 0.2	5 0.08	0.17
23_5 7_1 5_1 1		cases			1 ⁵ 1		

Conclusion

- ▷ Opportunities for "co-decision" are not the single most important aspect for generation of trust.
- Our results suggest that they are substitutable ... by tangible (and balanced) results/progress.
- ▷ "Process quality" seems to matter for some people but the two dimensions of process quality seem to matter independently also.
- "Configurational thinking" and corresponding analysis of longitudinal data (whether quantitative or qualitative) seems promising.

References

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