

# **Impact Analysis of External Quality Assurance of Higher Education Institutions**

## **Epistemological Aspects and Methodological Elements**

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WARNING! THEORETICAL, as yet

## Outline

- Motivations for Impact Analyses (IA) of External Quality Assurance (EQA) of Higher Education Institutions (HEIs)
- Principles of Theory-based IA
- General Design for IAs of EQA of HEIs
- Some Exemplary/Preliminary Ideas on Data Acquisition for IAs of EQA of HEIs

## **Motivations for IA of EQA of HEIs**

After more than 20 years of EQA of HEIs ...

- **Resolving the lack of systematic IA of (E)QA of HEIs**
- **Systematic/comprehensive incorporation of the student perspective**
- **Systematic/comprehensive incorporation of the lecturer/teacher experience**
- **Establish applicable models of IA of (E)QA of HEIs**
- **Contribution to cost/benefit analysis**

## **(4) Principles of Theory-based Impact Analysis**

- **Devising the causal chain**
- **Understanding the context**
- **Counterfactual and factual analysis**
- **Mixed methods approach**

Cf. (Leiber 2012, pp. 5 f.; White 2009, p. 7 ff.)

## General Design for IAs of EQA of HEIs

- True experimental design – practically unfeasible
- Comparison with control groups – practically unfeasible
- **BEFORE-AFTER COMPARISON (“reflexive control”) – a.c.d.s.**
  - Process tracing – a.c.d.s.
  - **Assessment and estimation of the effects of EQA by participants (“shadow control”) – a.c.d.s.**
  - **Assessment and estimation of the effects of EQA by experts – a.c.d.s.**

## **Exemplary Structure of a (Causal) Social Mechanism**

- Merton: endogeneous and self-reinforcing process can bring about a collective outcome that is unintended by all the individuals involved (self-fulfilling prophecy)
- Merton's canonical example: run on a bank
- Even an initially sound bank may go bankrupt if enough depositors withdraw their money in the (initially) false belief that the bank is insolvent

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Cf. (Hedström & Ylikoski 2010, p. 61 f., Merton 1968)

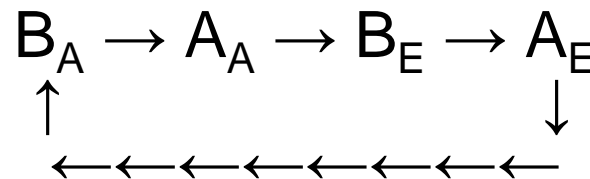
## Exemplary Structure of a (Causal) Social Mechanism

Effects	Effects	Effects	Effects	Effects	Effects
Causes	Causes	Causes	Causes	Causes	Causes
Rumour of insolvency	Some/more depositors get in fear of loss	Some/more depositors withdraw savings	Withdrawals symbolize (hypothetical) weakness of bank	Withdrawals strengthen belief of others in bank's financial difficulties	Rumour of insolvency increases
			Withdrawals partly weaken bank		

\* Cf. (Hedström & Ylikoski 2010, p. 61 f., Merton 1968)

## Exemplary Structure of a (Causal) Social Mechanism

- Basic / generalized structure of Merton's mechanism
  - Beliefs of Alter(s)  $B_A$  lead to decision to perform a certain action  $A_A$
  - $A_A$  influence Ego's belief  $B_E$  about the value of performing the act in such a way that Ego also decides to act:  $A_E$
  - Ego's action  $A_E$  strengthens belief of others in the value of performing the act etc.



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Cf. (Hedström & Ylikoski 2010, p. 62)



## Cause-Effect Matrix – a Preliminary Excerpt Exemplar

Causes of EQA	EQA Causes (= EQAM)	Levels of effects / causes of EQAM				
		Impact areas	L2	L3	L4	L5
Government decisions		<b>Quality of educational process</b>	Definition of expected learning outcomes/ study plans/ curricular development	Improved curricula and study plans	Improved curricular flexibility	...
Incentives / rewards					Smaller classes	
Expectations / requirements of stakeholders					Improved teaching materials	
Expectations / requirements of wider public					Mentoring programmes	...
				Focus on learning outcomes	Taking into account the views of employers	...
				Focus on competency based curricula	Taking into account market requirements	...

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## Some Exemplary/Preliminary Ideas on Data Acquisition for IAs of EQA of HEIs

- Methodological core: **survey questions for data acquisition (exemplars of first approximation!)**

What is your function/role in the HEI? [open answers, and/or multiple choice]

What is your function/role in the EQA process? [do.]

What is your motivation for taking part in that EQA (sub-)process? [do.]

What do you expect from a certain measure of the EQA process [to be chosen from the set of applied EQA measures]? [do.]

Multiple choice options are coming from, e.g., model types of action (and decision) and organisational models of HEIs.

## **Some Exemplary/Preliminary Ideas on Data Acquisition for IAs of EQA of HEIs**

- Methodological core: **survey questions for data acquisition (exemplars of first approximation!)**

How are decisions carried out in your area? [o.a., and/or m.c.]

How are decisions carried out in the HEI as a whole? [do.]

How is the HEI organised in your area? [open answers, and or multiple choice]

How is the HEI organised in other sub-systems [to be chosen from pre-analysis]? [do.]

## Some Exemplary/Preliminary Ideas on Data Acquisition for IAs of EQA of HEIs

- Methodological core: **survey questions for data acquisition**

If you think that governance/decision processes/organisational structures should be improved, then name your options. [o.a. and/or m.c.]

Did you observe the event  $E_n$  [to be chosen from the set of intended effects of the EQA procedure applied]?

If your answer is 'yes': Which event  $C_m$  [to be chosen from the set of applied EQA measures], in your opinion, has led to the event  $E_n$ ?

Such questions might be supplemented by questions which prove the probabilistic weight of different hypothetical causes held responsible for the effect  $E_n$ .

## Summarizing I

Proposed methodology is based upon four major pillars:

- Approach of **microfoundation** of causal explanation/mechanism in the social sciences (social mechanisms; structural individualism; middle-range theories / hypothetical system generalizations)
- **Organisation and action theories of institutional change** (e.g., evolutionary or decision-based; hierarchical or quasi-democratic)
- Different **models of causal mechanisms**
- Conception of **complete data acquisitions** from all HEI members

## Summarizing II

- The proposed methodology will **improve** our theoretical understanding (**know-why**).
- Its **application** will **deepen** our practical knowledge (**know-how**) about EQA induced changes in HEIs.
  - E.g., we will learn more about HEIs' networks – vertices and nodes – of motivation, decision, institutions, action, responsibility etc.
  - We will be enabled to identify means for **improving the impact of the work** (effectivity, efficiency, science-based approaches) **of QA agencies**.
  - ...

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**Thank you very much for your attention!**