

Research in medical education

Why and how?

Nynke Scherpbier, Tel Aviv, March 2017

I will be an evidence-based professor
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I will be an evidence-based pro





Research in medical education

Why and how?

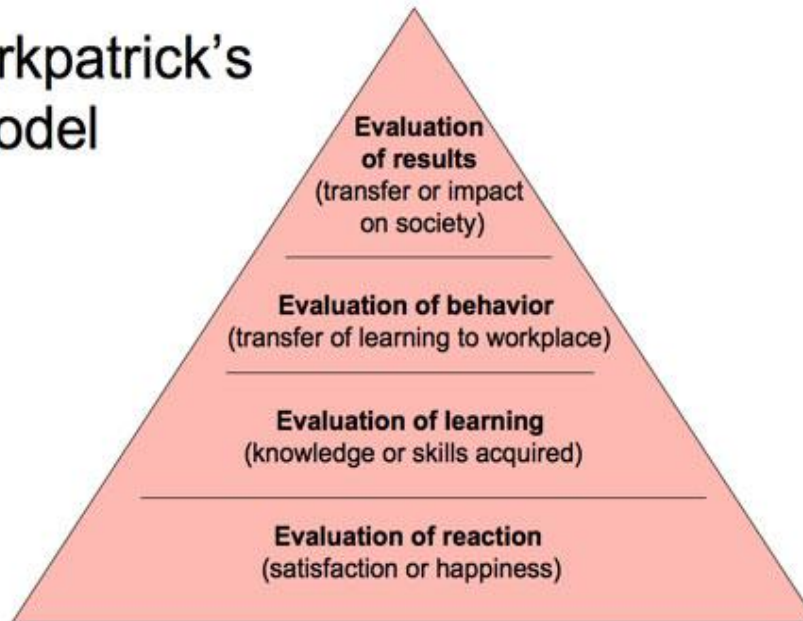
Why??

- **We want to base our decisions on evidence:**
- Predictive value of selection procedures?
- What works (and how) in practice based learning?
- Change curriculum?
- How to teach the teacher?

Research in medical education

Why and **how?**

Kirkpatrick's Model



Kirkpatrick's (2006) hierarchy of evaluation.

Methodology

- Exploring
- Measuring
- Mixed methods

Qualitative



Quantitative



	Quantitative	Qualitative
assumption	Variables can be measured	Variables are complex, intertwined
	Researcher 'outside' research	Researcher part of the process
purpose	generalisability	contextualisation
	prediction	understanding
approach	Hypothesis testing	Hypothesis generation
	From theory to data	From data to theory

Theory

- Positivism: reality is a truth
- Interpretivism: reality is subjective, social constructivism
- Criticalism: some meanings are overpowered by others

Learning theory, constructivism

- More than one reality:

realities arise from the construction of meaning and understanding,

based on the individual's context, previous experience and knowledge, attitude and beliefs.

Research tradititons

- Narrative
- Phenomenology
- Grounded theory
- Ethnography
- Case study

Stay in line!

- Worldview
- Study design
- Data collection
- Analysis
- Conclusion



Identify a problem

It starts with a question !

Describe

Explain

Explore

Investigate

Predict

Compare