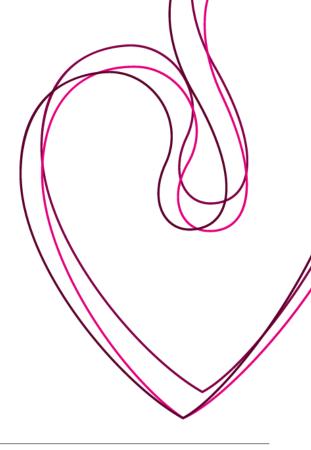
# **Evidence and its use in social policy in Denmark**

#### MICHAEL ROSHOLM

Department of Economics and Business Economics, University of Aarhus, & TrygFonden's Centre for Child Research











#### **Outline**

- A brief history of the use of evidence in danish labour market policy making
- 2. The use of evidence in labour market policy
  - The strategy for using and producing evidence
  - Examples: Bridging & Mentoring
  - When and how is the evidence used?
- 3. Use of evidence in policies for children (& youth)
  - Making research results comparable
- 4. Perspectives







# A brief history of the use of evidence in danish albour market policy making

1993: Rosholm receives first grant ever given by Ministry of Employment for a quant. analysis of impacts of ALMPs

1994: Report shows mixed results: "When using neoclassical econometrics, results are given in advance"

1993-5: First ever RCT on labour market training shows negative results

General perception => Empirical work is 'evil'. No more RCTs for 10+ years. Scepticism concerning impact evaluations in general





# A brief history of the use of evidence in danish policy making

1998-2000: Our first students are employed in Ministry

2000: Ministry of Employment introduces 'the simple impact measure' – a before-after estimator

2000-2: Dialogue between researchers and Ministry begins

2002: United front of researchers criticize 'the simple impact measure' at large meeting in ministry

2003-5: Better impact estimators introduced, Ministry commissions several impact evaluations using non-experimental methods





# A brief history of the use of evidence in danish policy making

2005-6: First 'serious' RCT study: Quickly Back to work. Shows large positive effects

2007: First official strategy for producing and using evidence

2006-17: ~20 RCTs conducted and tons of non-experimental impact evaluations and projects

2010-: Evidence systematically used to inform and improve labour market policy!!

2012-: Two more ministries commence to develop strategies for using evidence







## The strategy for using and producing evidence

- Jobeffekter.dk clearinghouse → www.jobeffekter.dk
- Several inspiration projects each year evaluated by 'brute data force' methods: D-i-D, PSM
- RCTs 1-3 per year.
  - Unemployed
  - Sicklisted
  - Disadvantaged youth
- New policies should be based on solid evidence

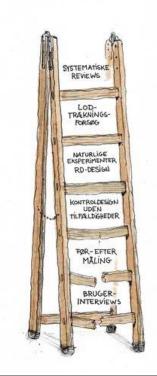






#### What is solid evidence?

- 1. Systematic reviews
- 2. Randomised controlled trials (RCTs)
- 3. Natural experiments etc.
- 4. Matched control groups
- 5. Before-after
- 6. User interviews



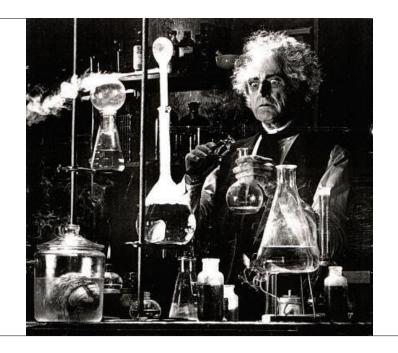






## Example: Disadvantaged youth on welfare

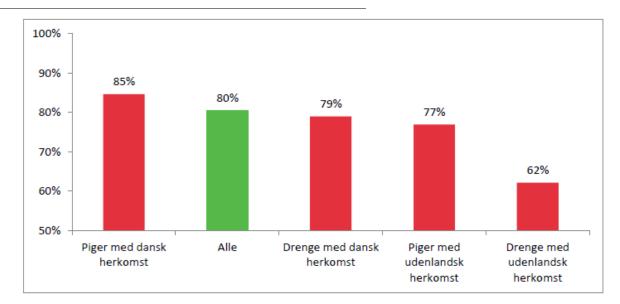
2 interventions: Bridging and Mentoring







## Fraction of a youth cohort who have not completed high school or vocational school 7 years after leaving compulsory school, 2013



Source: Profile model, Ministry of Children, Education, and Gender Equality, 2013



- Some of these are employed in unskilled jobs
- Some attempt several times to complete a high school or vocational education, but dropout rates are large,
- so many end up on welfare for shorter or longer periods
- ... they are the **target** of the interventions studied here









**Aim**: Design interventions to help youth into the ordinary educational system (or employment)





#### What's the problem(s!)?

- No formal qualifications, only 12% satisfy requirements for continuing education
- Non-cognitive deficits; school absence, teen motherhood, debts, behavioral problems, crime, drugs, alcohol
- Mental health problems









#### **Existing evidence:**

Mentoring has potential (reviews by DuBois *et al.*, 2011; Rodriguez-Planas, 2012; 2014), *especially when aimed at disadvantaged youth* 

Heckman & Mosso (2014): "...the most promising adolescent interventions feature mentoring and scaffolding. ... integrate work with traditional education and attenuate the rigid separation between school and work ... teaching valuable character (noncognitive) skills (showing up for work, cooperating with others, and persevering on tasks). "







 Target group: 18-29 years of age, on welfare, not immediately considered ready for education, no qualifying education



- Intake period: August-October 2012
- Selection: Meeting w. case worker during period, if eligible then randomization
  - approx. 2x100 youth per participating jobcenter (13 jc's)





Assignment of a mentor, at least weekly contact to youth (and more)

#### Mentor

- is NOT a case worker
- is employed by jobcenter (no volunteers)
- undertakes a mentoring course
- receives supervision







#### Role of mentor:

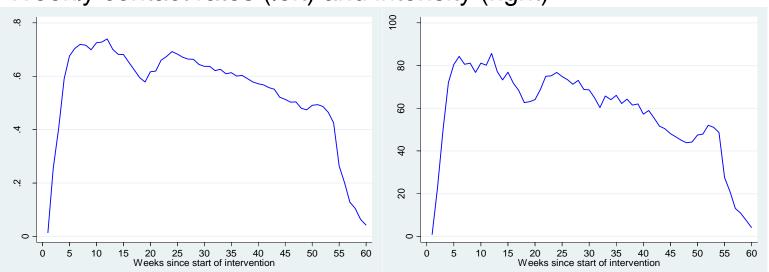
- Assist wrt to education; contact to educ inst, support (efterværn), cooperate with educ inst
- Assist wrt personal problems that is a hindrance for educ
- Help the youth exercize his/her rights (e.g. psych help ico depression etc.)
- Help to get started with 'healthy leisure activities' etc.
- Help remembering meetings, appointments etc.,
- Stops after 52 weeks or when starting an education or employment







#### Weekly contact rates (left) and intensity (right)









- Target group: 18-29 years of age, on welfare, no qualifying education,
  - Socially disadvantaged, no cognitive deficits
  - Cognitively disadvantaged, no social skills deficits
  - ... in reality, lots of actual participants had both types of problems
- Intake period: March 2013-Dec 2014
- Selection: Meeting w. case worker during period, if eligible then assignment (no randomisation)
  - 12 educational institutions all over DK ran the interventions







#### Three elements:

- Mentors
- Cognitive training
- Work and education practice







- An education plan is formulated
- Screening of reading, writing and math abilities
- Training reading, writing and math abilities at individual capacity
- Intervention takes place in ordinary educational institution
- Fixed schedule, daily routine practice
- Practice periods, visits to other educational insititutions
- Assignment of a mentor, stays with the youth during the intervention period and until basic vocational track is completed
- Individualised support for obtaining vocational training at an employer (praktikplads)
- Plan B





- An average bridging intervention lasted 15 weeks in a vocational school
- 2607 youth participated
- 2400 were included in the evaluation (the remaining did not meet the formal requirements for being in the target group)





## Bridging & Mentoring: Data

Data from DREAM register - **D**anish **R**egister for **E**valuation of labour market policy (**A**rbejds**M**arkedspolitik) – merged w. register data at Stat.DK.

- Weekly information on labour market status and participation in LAB activities
- Information on activities under the program
- Information on background characteristics







## Bridging & Mentoring: Descriptives

- Half or more have no grades from compulsory SLE
- 40% had psychiatric diagnosis within past 5 years
- They spent on average 235 days in foster care during childhood (+similar duration in-home intervention)
- 20% have a father convicted of a violent or sexual crime
- 50% of parents were not employed in 2011
- 45-50% of parents had no qualifying education
- 70% had parents who did not live together in 2011







## Bridging & Mentoring: Evaluation

#### Mentor intervention is evaluated with RCT

- Extensive set of controls
- Subgroup analyses

#### Bridge building is evaluated with propensity score matching

- Robustness checks, different comparison groups and algorithms
- Extensive set of controls
- Subgroup analyses







## Bridging & Mentoring: Main results

Mentor: ~1.5 percentage point increase in completed

vocational education

~3.5 percentage point increase in employment

rate

Bridging: ~10 percentage point increase in completed

vocational basic education

~3 percentage point increase in employment

rate







## Bridging & Mentoring: Cost considerations

#### Average cost per participant

• Mentor \$3550

Bridge building \$4900







#### When and how is the evidence used?

#### Results from Mentoring and Bridging ->

- Bridging was made first choice of intervention for disadvantaged youth
- Mentoring scaled down
- New bridging intervention designed and tested in RCT starting summer 2017 - focusing on identifying active ingredients
  - Designed by ministry in collaboration w. inter-disciplinary team of researchers and practitioners in the field







#### When and how is the evidence used?

Past four years: three committees/commissions appointed to recommend labour market policy reforms:

- Carsten Koch 1: Reform ALMPs aimed at UI benefit recipients. 39 recommendations based on evidence. 35 implemented
- Carsten Koch 2: Reform ALMPs aimed at LTU. Report released just before election – subsequently about half of recommendations implemented
- **UI benefit commission:** Reform UI benefit scheme (eligiblity, duration, incentives etc.). 90-95% implemented









# Use of evidence in policies for children (& youth)





## Use of evidence in policies for children (& youth)

Ministry of education
Ministry of Social Affairs & Children

- Began thinking about use of evidence around 2012-13
- ...so about a decade behind Ministry of Employment
- But we are trying to speed up the process: TrygFonden's Centre for Child Research





# What is TrygFonden's Centre for Child Research?







## What is TrygFonden's Centre for Child Research?

#### Interdisciplinary research centre at AU

- Grant from TrygFonden (DKK 60mill). Additional funding of similar size. 6 year period, extendable to 10 years.
- Provides scientific evidence on what works
- Psychologists, political scientists, economists, sociologists, criminologists, education researchers, anthropologists,
- 35+ randomised controlled trials (RCTs) of interventions aimed at children and youth
  - plus other projects and effect studies







## Completed interventions with results

INTERVENTION		INSTITUTION	METHOD
•	Nursery intervention (lang. and early math)	Nurseries	RCT
•	LEAP (language in daily activities)	Kindergarten	RCT
•	SPELL (manualized language in small groups)	Kindergarten	RCT
•	'Suitcase' (language for bilingual children)	Kindergarten+home	RCT
•	Chess & mathematics	Schools, grade 1-3	D-i-D
•	READ (reading intervention)	Schools, grade 1-2	RCT
•	Two-teacher (lang. + math)	Schools, grade 6	RCT
•	'Mothertongue' teaching (extra lectures)	Schools, grade 4	RCT
•	Bridging (on-site educ. prep.)	Youth on welfare	PSM
•	Mentor (educ.)	Youth on welfare	RCT







## Effect comparisons

Impacts measured on cognitive outcomes or educational outcomes

- Language tests in nurseries/kindergartens
- Compulsory language tests in school
- Educational attainment for youth

These effects are not immediately comparable. How do we then compare impacts?







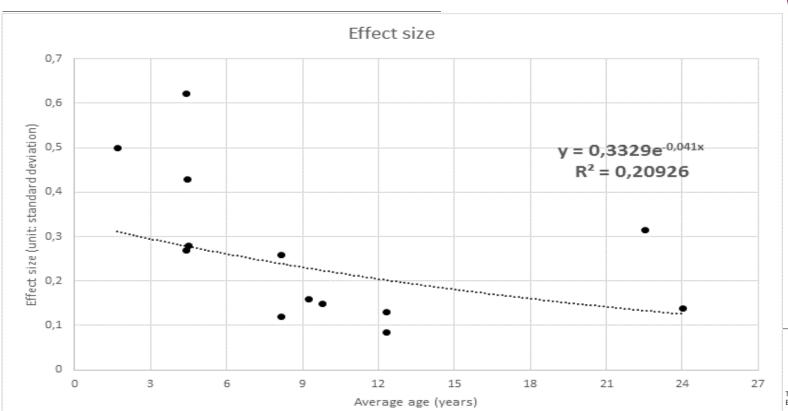
## Effect comparisons

Standardize effect sizes (standard deviation units):  $d = \delta/s$ 

- d is informative on how much an intervention moves someone in the distribution of outcomes:
- For example, if *d*=0.4, someone initially at the median would move to 66<sup>th</sup> percentile



## Results, effect sizes by age







#### Making results more comparable

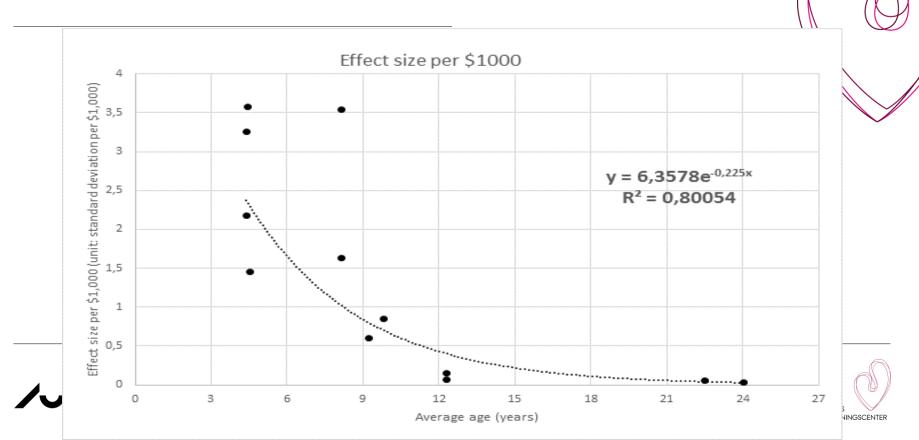
Normalize with costs per participant

Calculate effect size per \$1000 invested (per person)





# Preliminary results, effect sizes per \$1000 invested, by age



#### Perspectives

Evidence can be used for improving policy:

- DK has lowest structural unemployment rate in Europe and very flexible labour market – from EuroSclerosis to Flexicurity!
- Recent discussion: is there a need for more reforms?

We are not (yet) very good at providing equal opportunities for children and youth: need for evidence to improve interventions

Definitely need for reforms – but still a bit of way to go





