Evidence and its use in social policy in Denmark

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Outline

1. 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
Bridging & Mentoring

• 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
Bridging & Mentoring

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

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
Bridging & Mentoring

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). “
Mentor intervention

- 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)
Mentor intervention

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
Mentor intervention

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
Mentor intervention

Weekly contact rates (left) and intensity (right)
Bridging intervention

• 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
Bridging intervention

Three elements:
• Mentors
• Cognitive training
• Work and education practice
Bridging intervention

- 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 institutions
- 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
Bridging intervention

- 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 - Danish Register for Evaluation of labour market policy (ArbejdsMarkedspolitik) – 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

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| 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 (eligibility, 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

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<tr>
<th>INTERVENTION</th>
<th>INSTITUTION</th>
<th>METHOD</th>
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<tbody>
<tr>
<td>Nursery intervention (lang. and early math)</td>
<td>Nurseries</td>
<td>RCT</td>
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<td>LEAP (language in daily activities)</td>
<td>Kindergarten</td>
<td>RCT</td>
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<tr>
<td>SPELL (manualized language in small groups)</td>
<td>Kindergarten</td>
<td>RCT</td>
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<tr>
<td>‘Suitcase’ (language for bilingual children)</td>
<td>Kindergarten+home</td>
<td>RCT</td>
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<tr>
<td>Chess &amp; mathematics</td>
<td>Schools, grade 1-3</td>
<td>D-i-D</td>
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<td>READ (reading intervention)</td>
<td>Schools, grade 1-2</td>
<td>RCT</td>
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<td>Two-teacher (lang. + math)</td>
<td>Schools, grade 6</td>
<td>RCT</td>
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<tr>
<td>‘Mothertongue’ teaching (extra lectures)</td>
<td>Schools, grade 4</td>
<td>RCT</td>
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<tr>
<td>Bridging (on-site educ. prep.)</td>
<td>Youth on welfare</td>
<td>PSM</td>
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<tr>
<td>Mentor (educ.)</td>
<td>Youth on welfare</td>
<td>RCT</td>
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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): \( d = \frac{\delta}{s} \)

- \( d \) 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\(^{th}\) percentile
Results, effect sizes by age

\[ y = 0.3329e^{-0.041x} \]

\[ R^2 = 0.20926 \]
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

\[ y = 6.3578e^{-0.225x} \]

\[ R^2 = 0.80054 \]
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