Skills for social progress Empirical Analysis

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High level policy forum
Sao Paulo, Brazil, March 2014

Elevator Pitch

- Skills determine a large set of outcomes (schooling, labor market, social behavior, among others).

- This research presents ideas and evidence to enhance children's social and emotional skills by comparing evidence from multiple countries.

Goal of Empirical Analysis:

- Which social and emotional skills influence individuals' future economic and social prospects.
- To identify which learning contexts shape the development of children's social and emotional skills.
- This is NOT rocket science…it can be done!

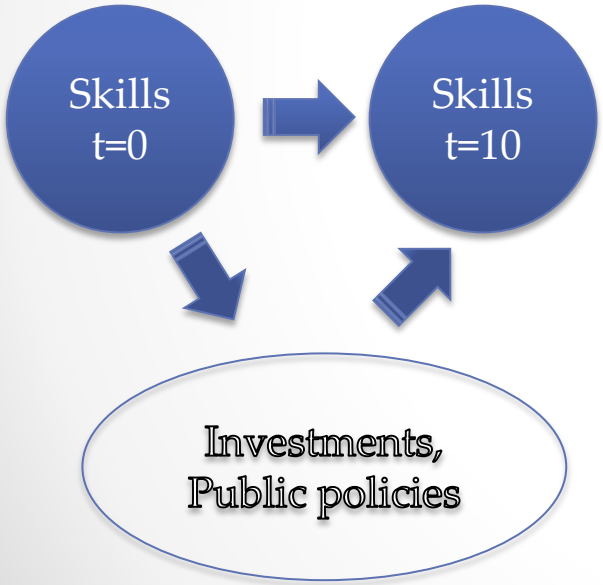
Ultimately, to implement evidence based public-policies we need to identify specific types of skills that need to be nurtured, and how best to promote them.

Countries

- Australia: Longitudinal Survey of Australian Children (LSAC), Australian Temperament Project (ATP)
- Belgium: Longitudinal Research in Secondary Education (LOSO)
- Canada: Youth in Transition Study (YITS)
- Germany: Mannheim Study of Youth (MARS)
- Korea: Korean Youth Panel Studies (KYPS)
- New Zealand: Competent Children (CC)
- Norway: Young in Norway (YiN)
- Sweden: Evaluation Through Follow-up (ETF)
- Switzerland: Transition from Education to Employment (TREE)
- United Kingdom: British Cohort Study (BCS)
- United States: Early Childhood Longitudinal Study –Kindergarten (ECLS-K)

Teams: Ben Edwards and Galina Daraganova (Australian Institute for Family Studies), Steven Groenez (University of Leuven, Belgium), Ross Finnie (University of Ottawa, Canada), Michael Kottelenberg and Steve Lehrer (Queen University, Canada), Friedhelm Pfeiffer and Karsten Reuss (Centre for European Economic Research, Germany), Lihong Huang (Oslo and Akershus University of Applied Sciences, Norway), Jan-Eric Gustafsson and Elias Johannesson (Gothenburg University, Sweden) and Robin Samuel (University of Basel, Switzerland), Miguel Sarzosa and Ricardo Espinoza (University of Maryland).

The Basic Idea



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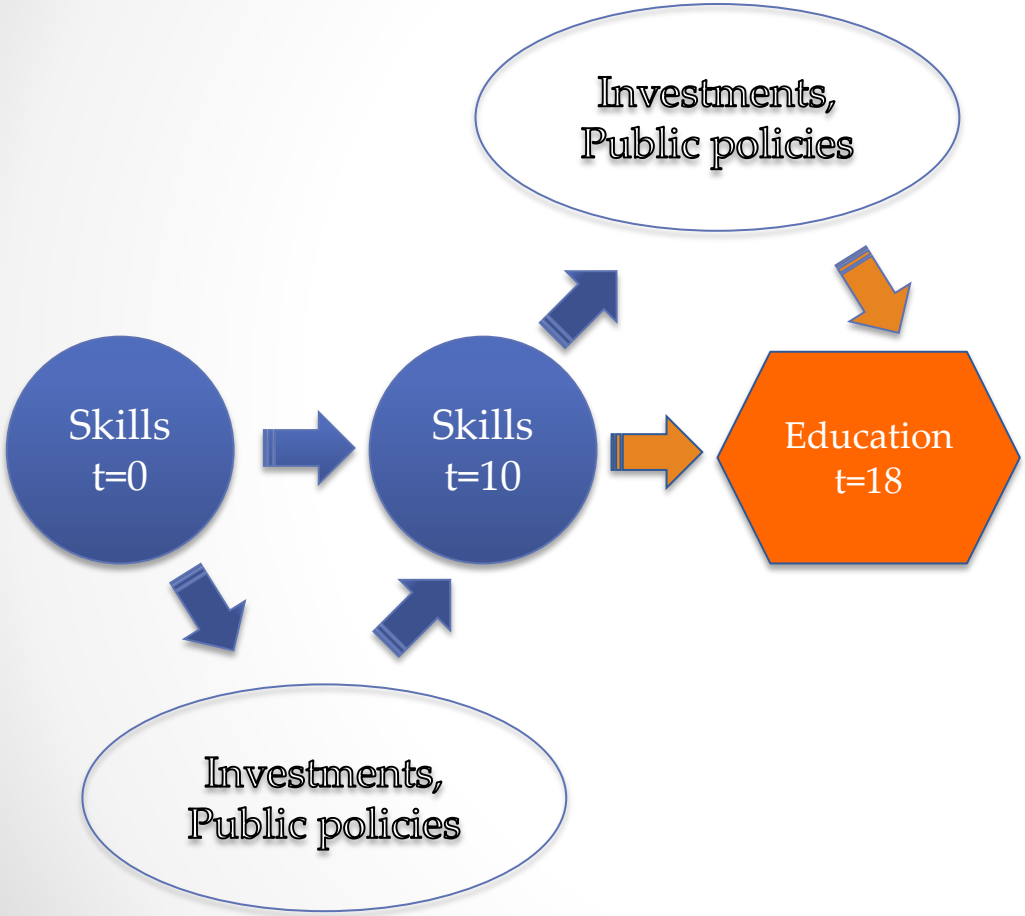

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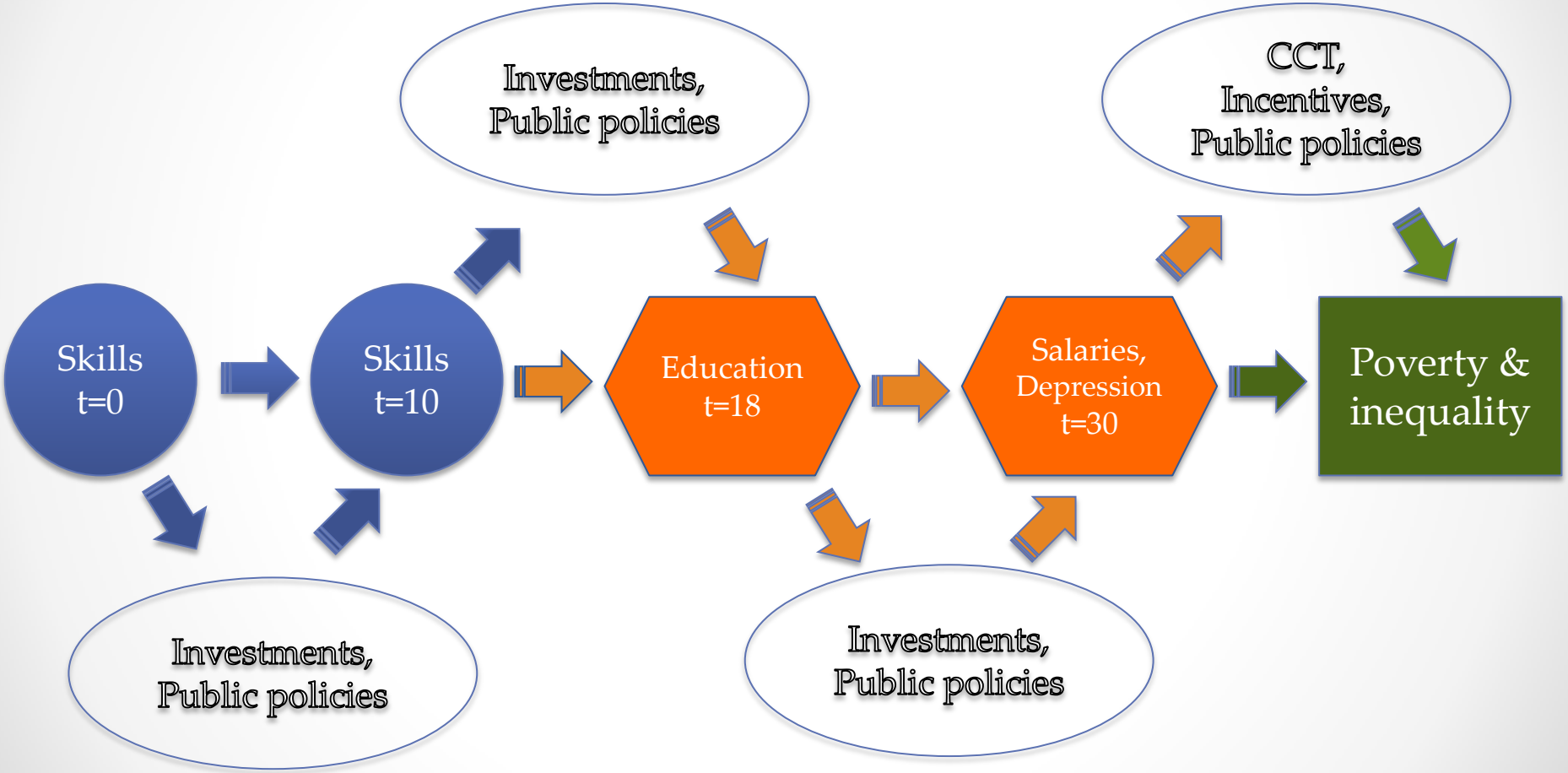


The Empirical Analysis in a Nutshell

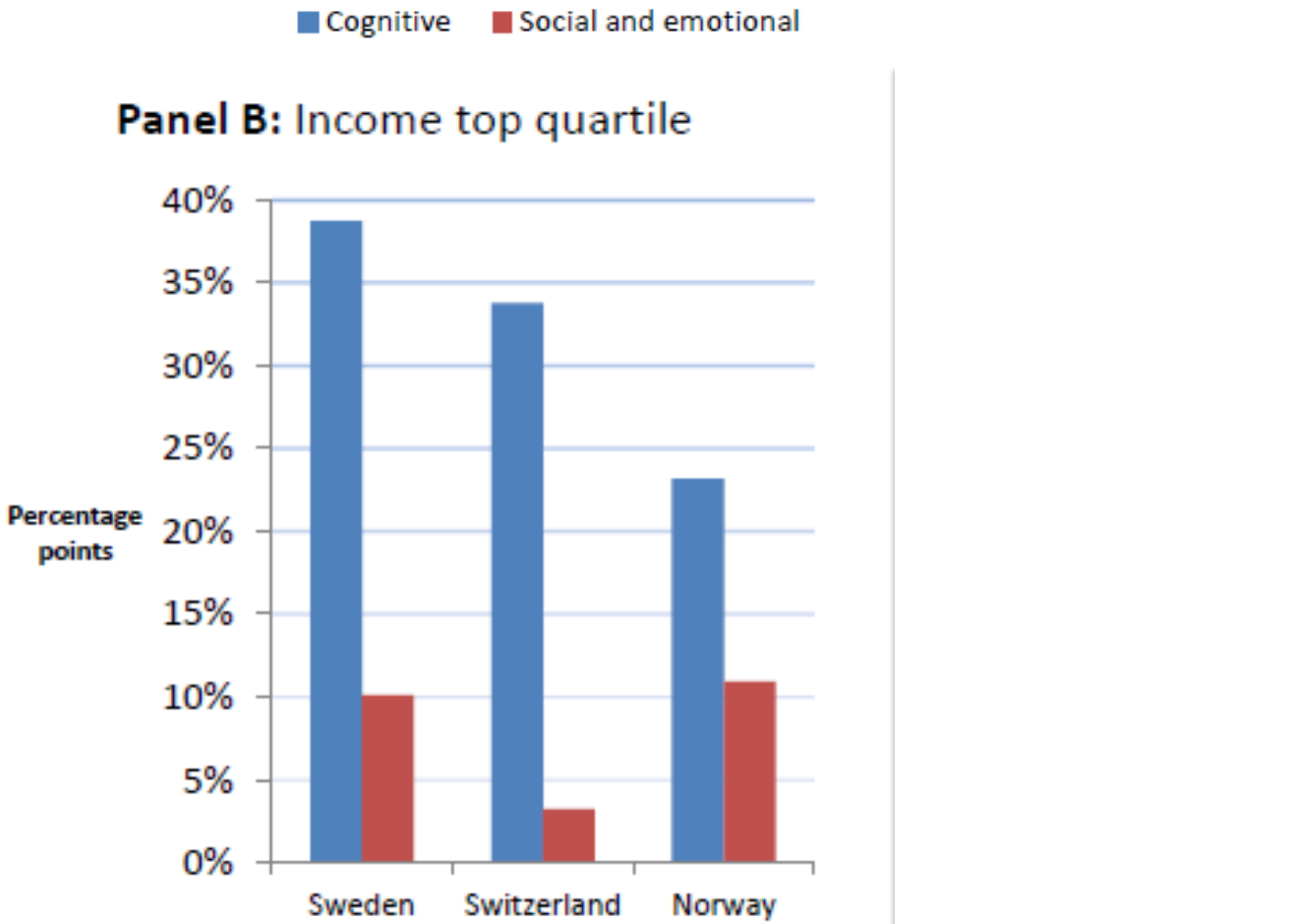
Existing longitudinal data sets from OECD countries are not ideal, but they still provide valuable sources of information

- **Data requirements**
  - Multiple and good measures of cognitive, social and emotional skills over time
  - Multiple and good measures of investments and outcomes
  - Controls and sample size
  - We developed user "friendly" code that has been utilized by the country teams
- **The empirical analyses demonstrate:**
  - Causal effects of (unobserved) skills on multiple outcomes (latent factor model and using counterfactual)
  - The process /pathways of skill development (dynamics model: progressive development of skills)

Nevertheless, it would be ideal to have a custom made longitudinal data designed to precisely estimate the causal returns to skills and the developmental pathways

Example of Impact of skills on outcomes

Percentage points changes in outcomes due to a simulated increase in skills from the lowest to the highest decile

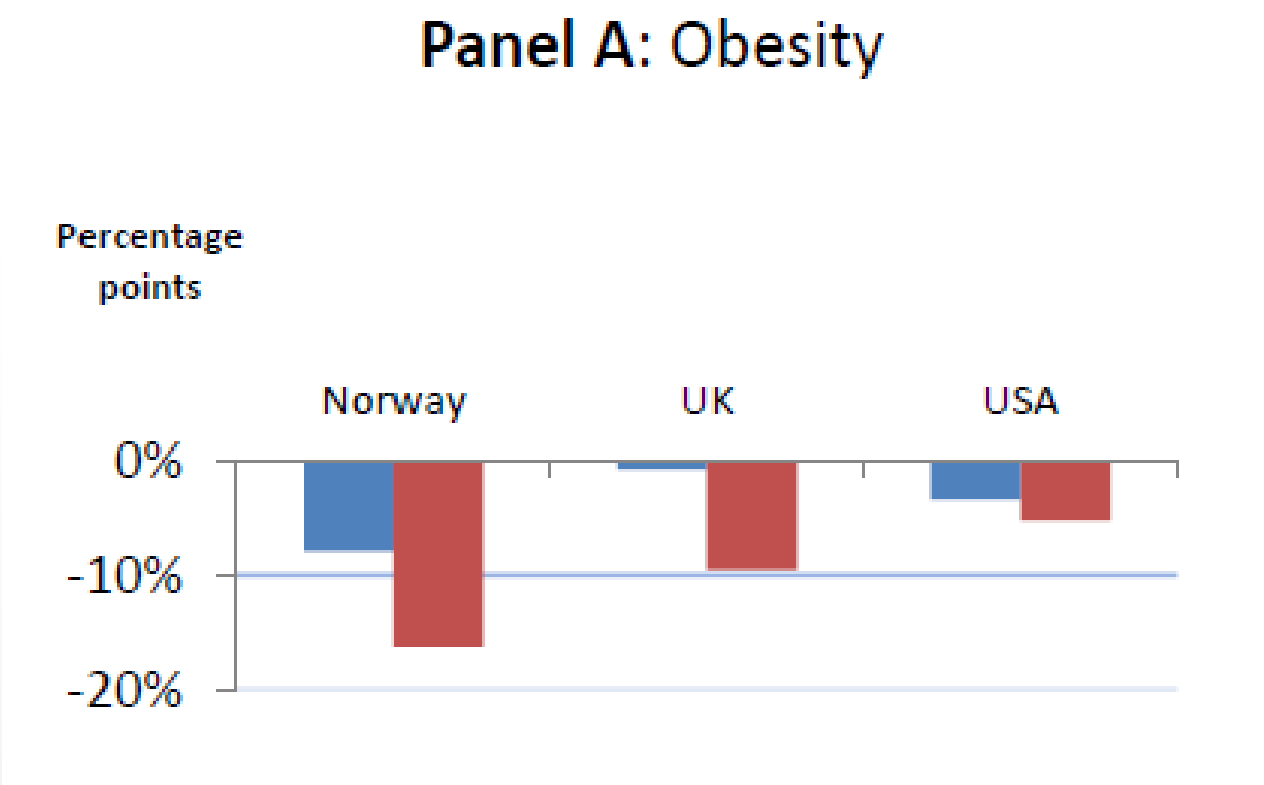


Note: Skills differ across countries. See the report for a detailed description.

Example of Impact of skills on outcomes

Figure 3.2 Social and emotional skills have a high impact on social outcomes

Percentage points increase in outcomes due to a simulated increase in skills from the lowest to the highest decile



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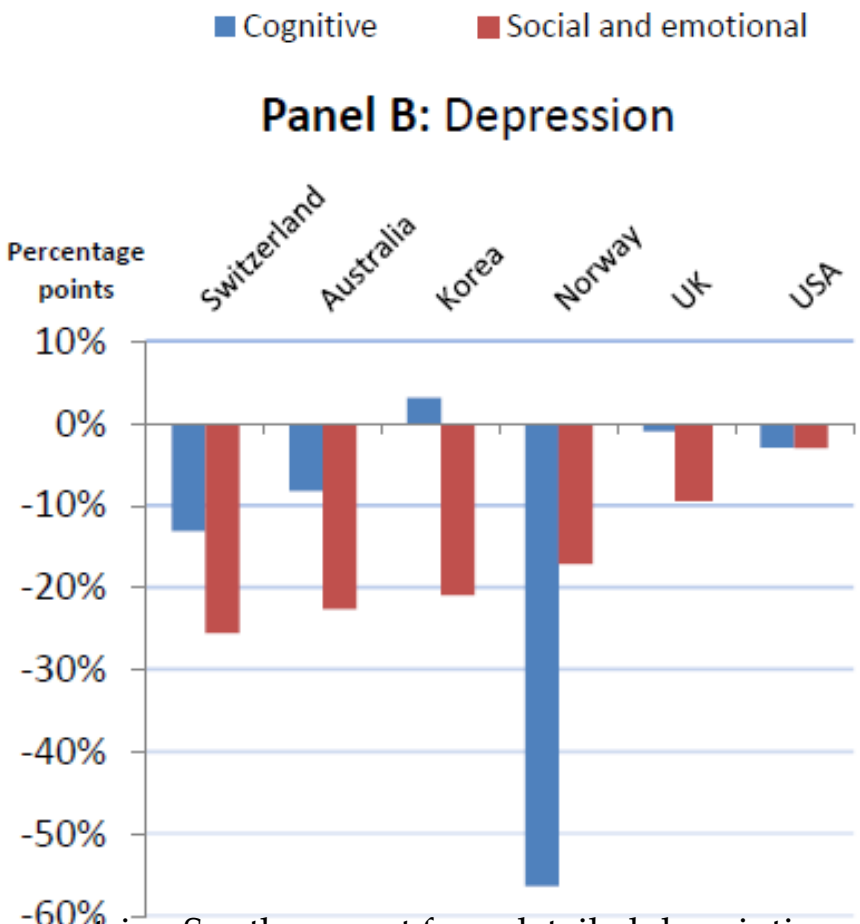

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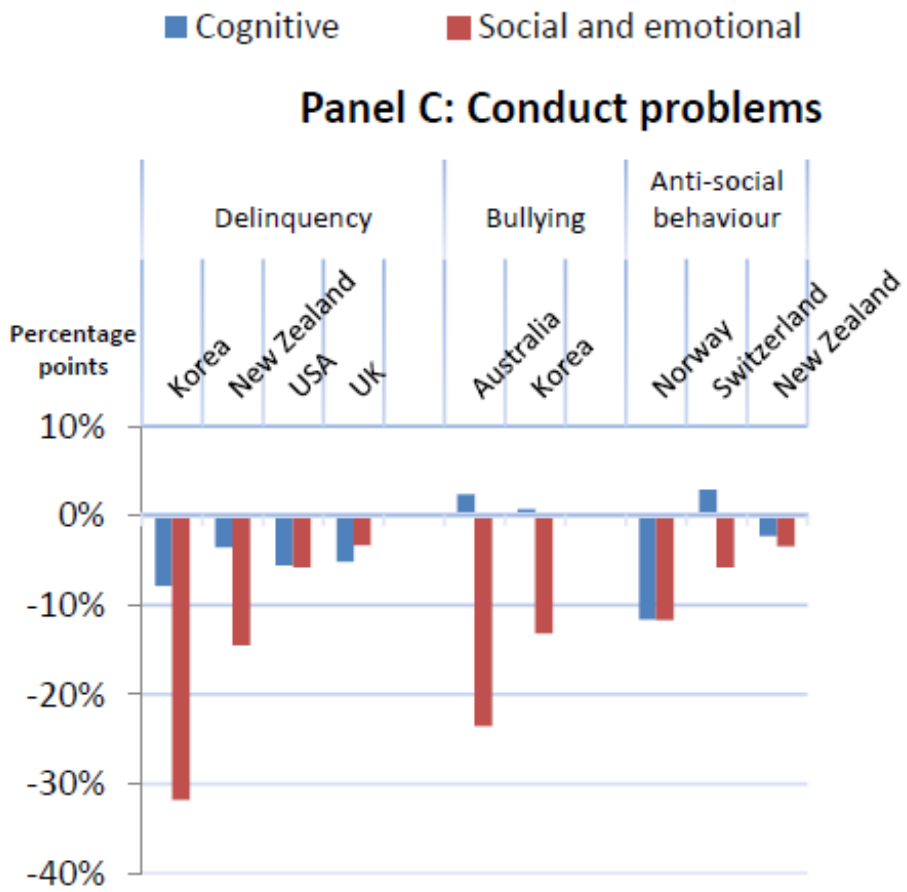

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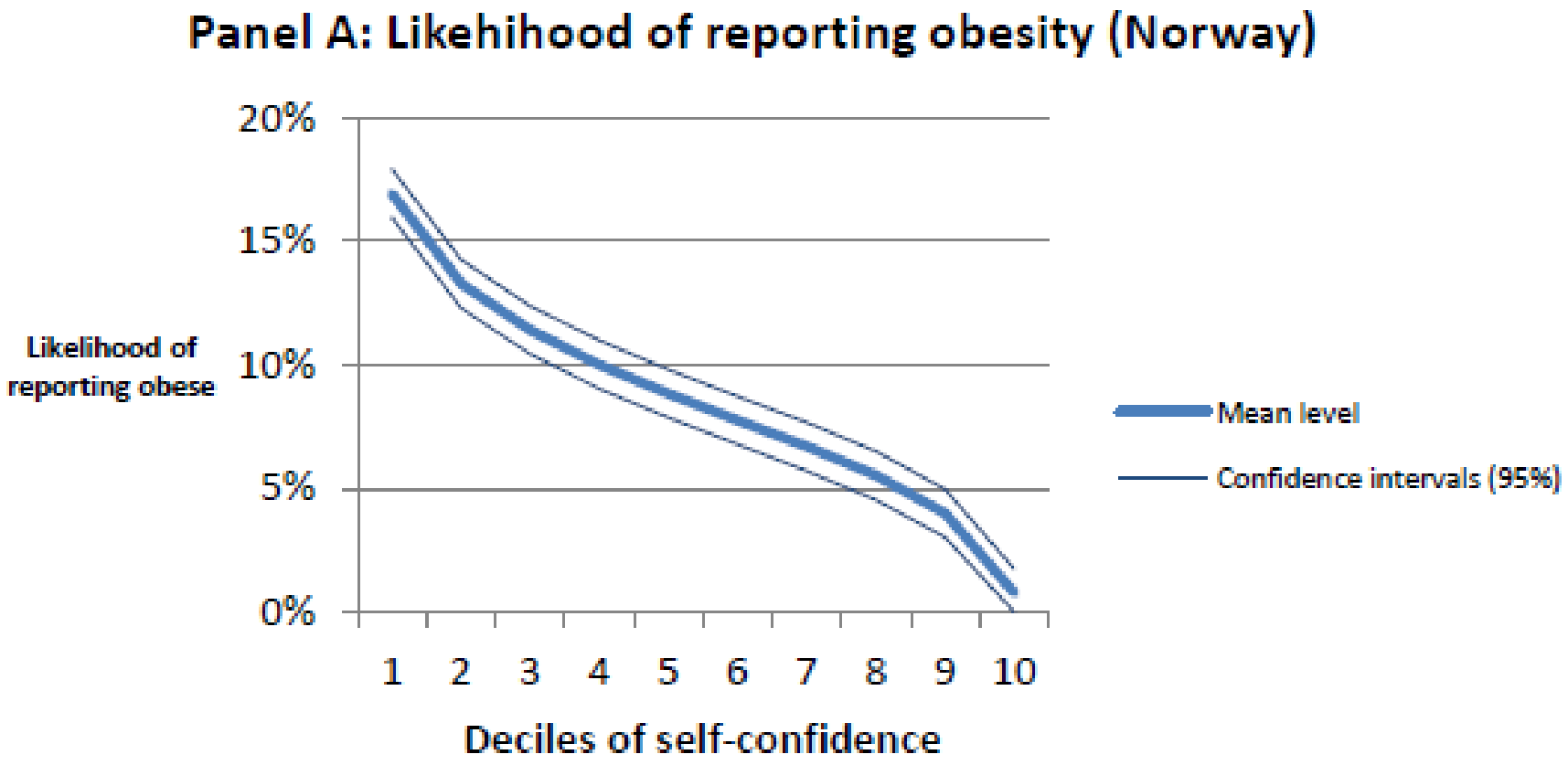
confidence among Norwegians…

Figure 3.7 Social and emotional skills progressively improve social outcomes



…responsibility among Koreans…

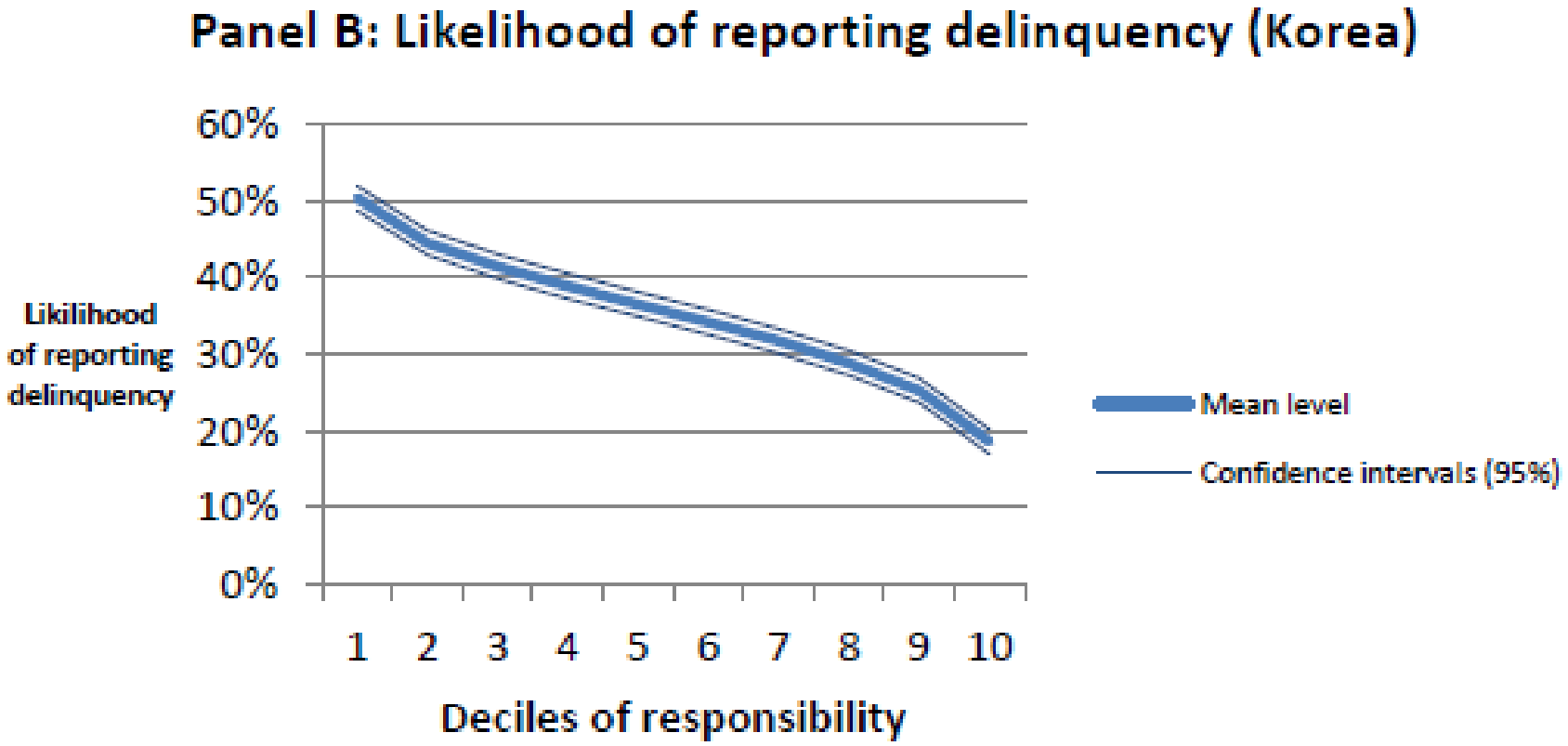
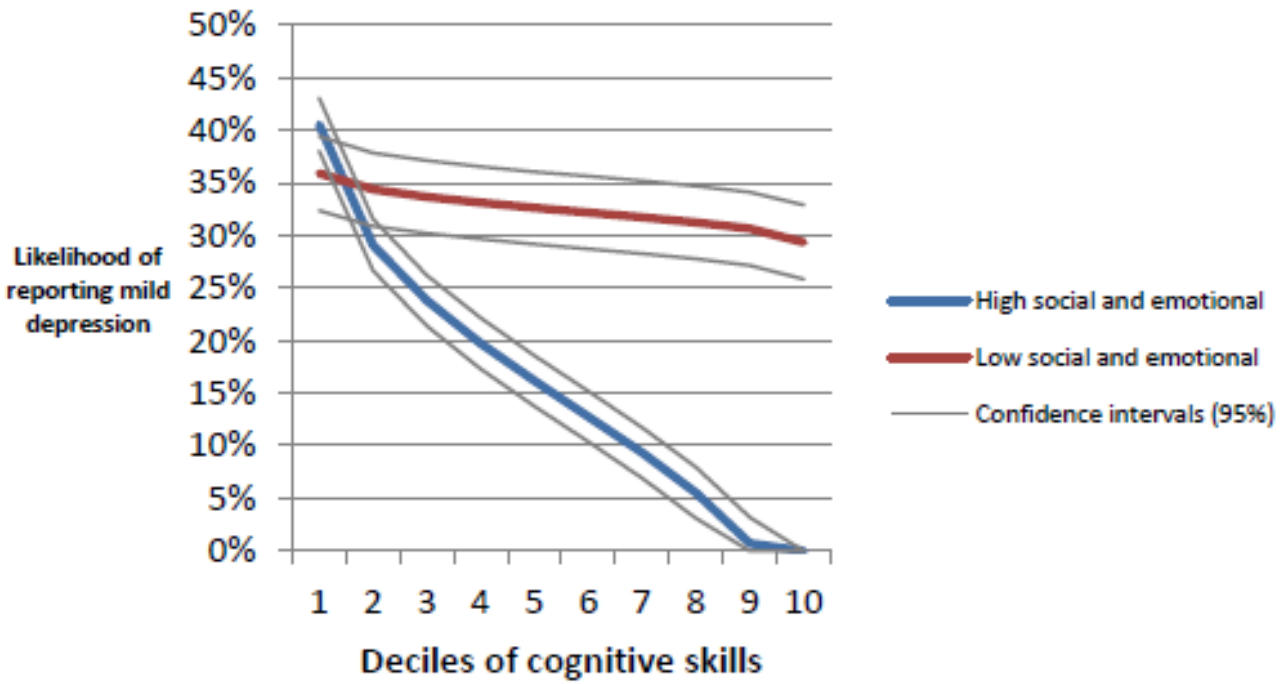


Figure 3.7 Social and emotional skills progressively improve social outcomes

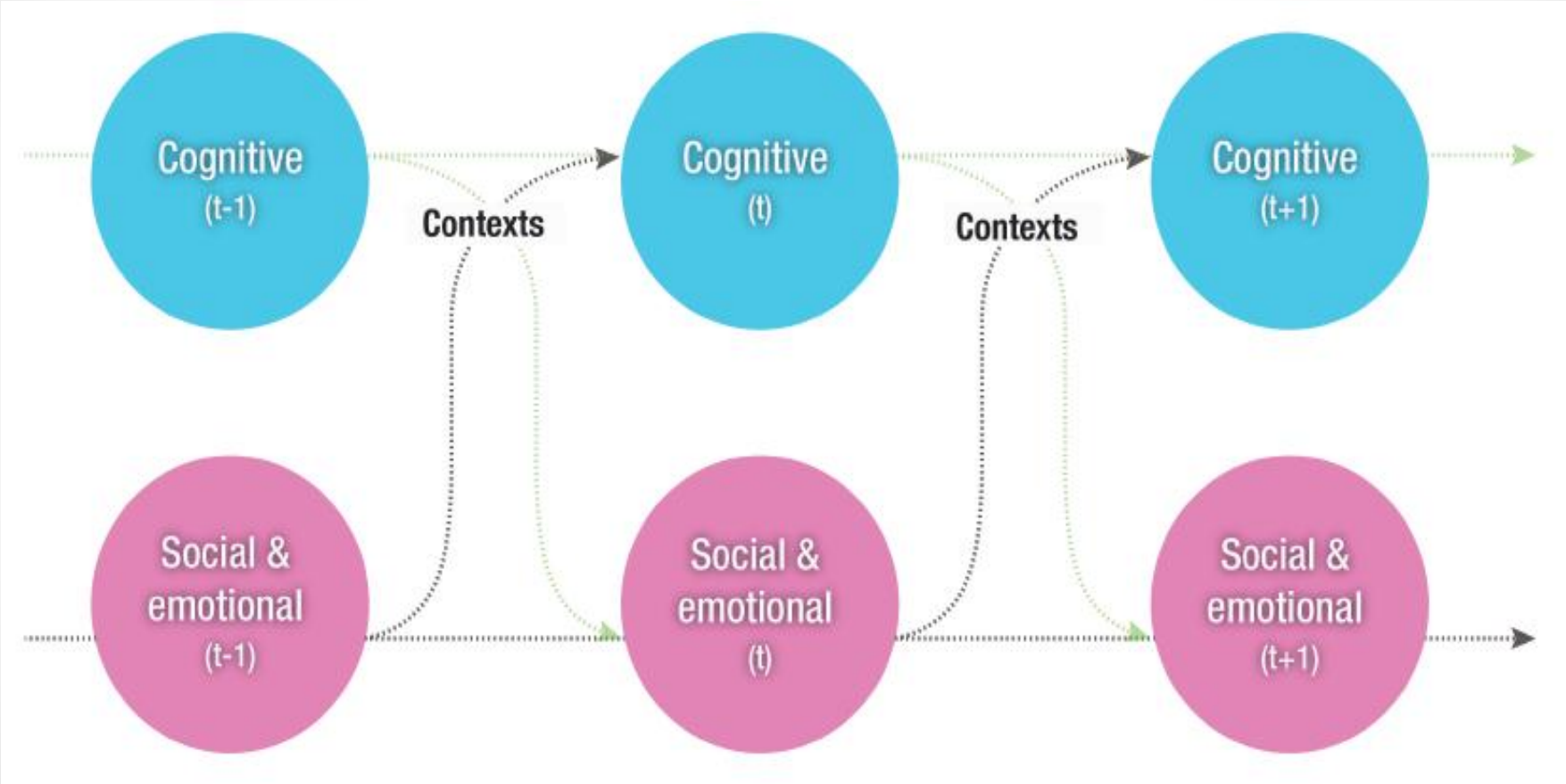
…and cognitive ability among Swiss.

Figure 3.6 The impact of cognitive skills on reducing the likelihood of depression is higher among those with higher social and emotional skills (Switzerland)

Likelihood of being depressed by deciles of cognitive skills for those in the top and bottom quartile of the self-esteem distribution in Switzerland



Process of skill formation

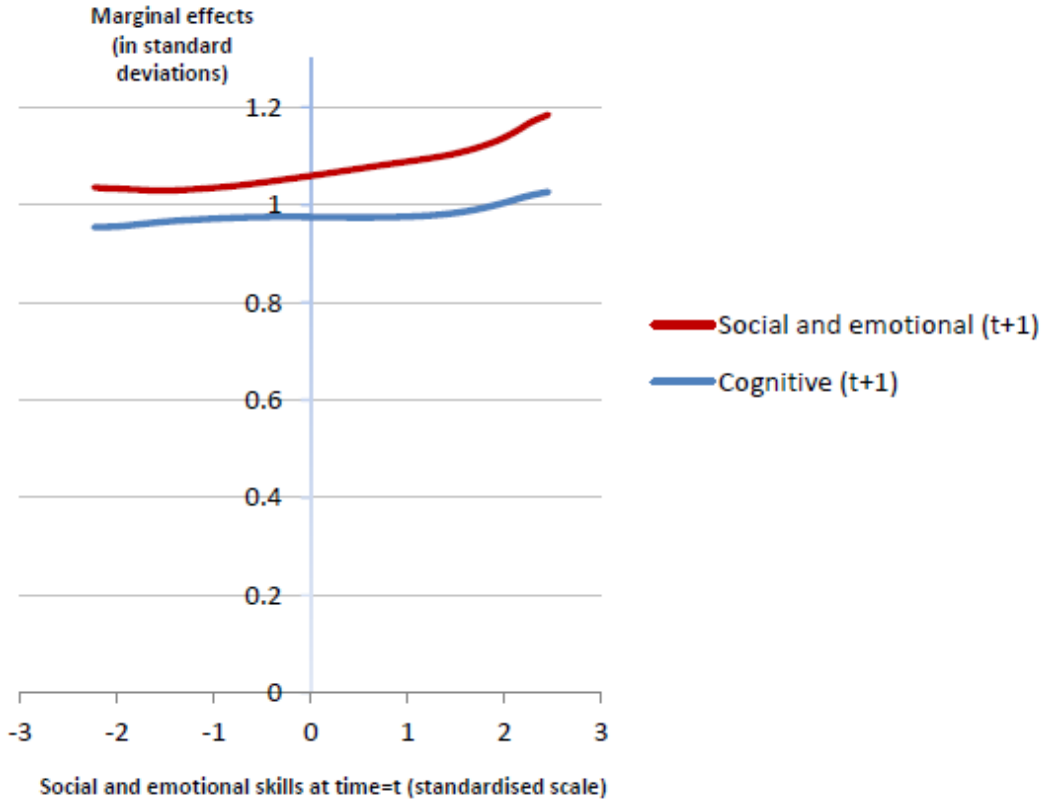


Formal discussion: Cunha & Heckman (2007).

Skill formation in Korea

Figure 4.2 Past skills drive future skills (Korea)

Marginal effects of increasing social and emotional skills (time=t) by 1 standard deviations on skills (time=t+1), by social and emotional skills (time=t)



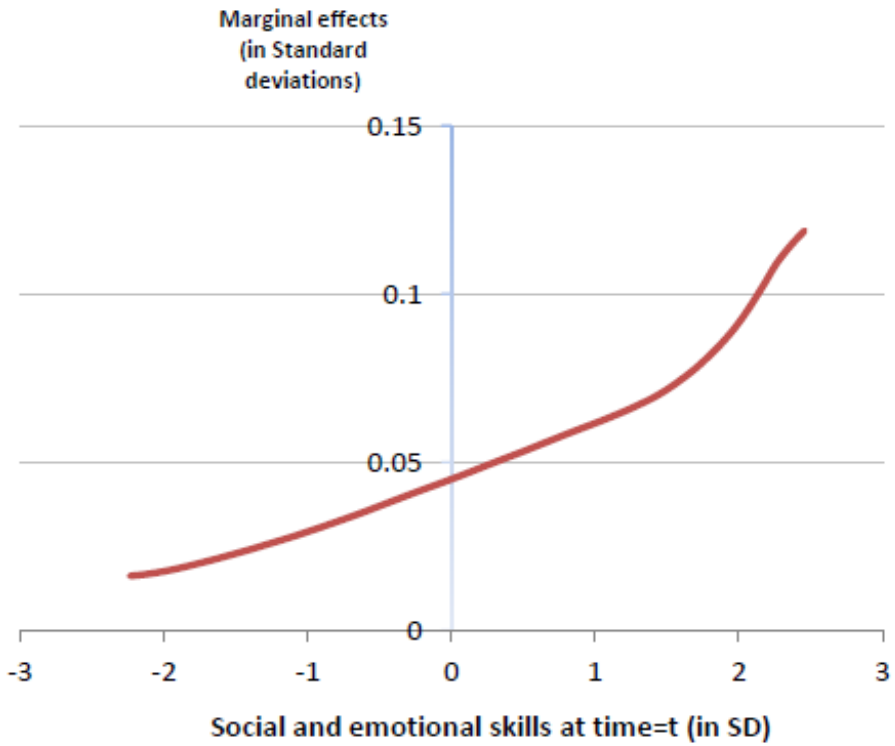
Socio emotional in *t*,

Socio emotional and cognitive in *t+1*

Skill formation in Korea

Figure 4.3 Social and emotional skills raise children's capacity to further develop social and emotional skills through investments (Korea)

Marginal effects of investments (time =t) on social and emotional skills (time=t+1), by social and emotional skills (time=t)



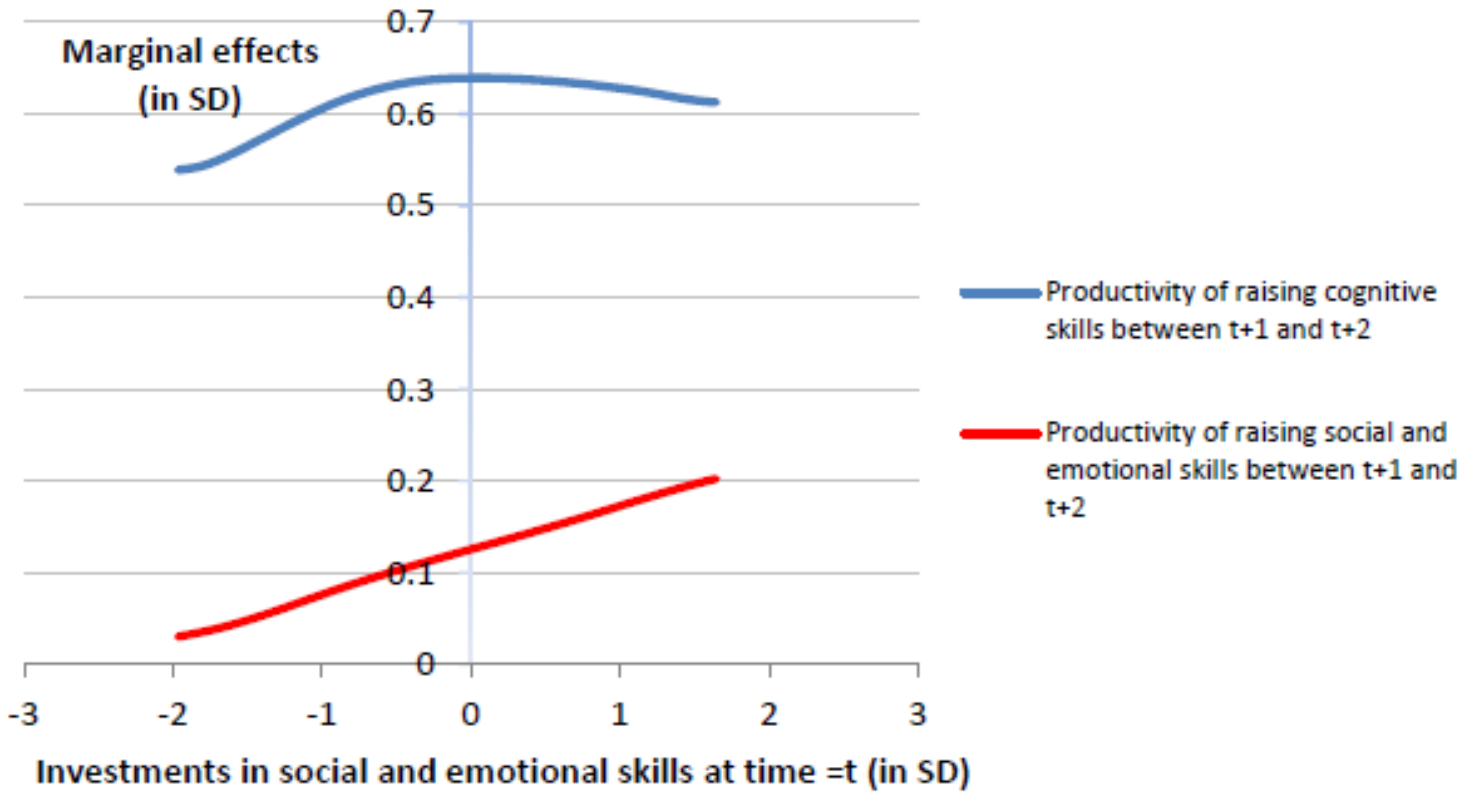
Investments t,

Socio emotional in *t+1*

Skill formation in Korea

Figure 4.4 Investment in skills today raises the returns on future investment in skills (Korea)

Marginal effects of investments on skills, by levels of social and emotional skills at time=t



Investments in *t*, the effect of future investments (t+1) in cognitive and socio-emotional in *t*+2

Key messages

- Young people with a strong social and emotional foundation can better thrive in a highly dynamic and skill-driven labour market by persevering and working hard.
- There is a need to rethink policies to better address what young people need and to prepare them to face the socio-economic challenges of the 21st century.
- Investing in education and skills (AND DATA!) is one of key policies for ensuring prosperous, healthy, engaged, responsible and happy citizens. Multidisciplinary efforts are critical.