Is there a scientific justification for the current use of child labour and working hours in social LCA?

Rickard Arvidsson, Jutta Hildenbrand, Henrikke Baumann

Chalmers University of Technology, Environmental Systems Analysis

The authors

Pictures from www.chalmers.se

Jutta
"LCSA person"

Kikki
"Part-time social
scientists"

Rickard
"Part-time politician"

Working hours and child labour in the SLCA literature

Subcategories

Freedom of Association and Collective Bargaining
Child Labour
Fair Salary
Working Hours
Forced Labour
Equal opportunities/Discrimination
Health and Safety
Social Benefits/Social Security

In
"the Guidelines"…

… and in
"the Handbook".

Workers

Health and safety
Wages
Social benefits
Working hours
Child labour
Forced labour
Discrimination
Freedom of association and collective bargaining
Employment relationship

Scientific justification?

- In SLCA, the Guidelines and the Handbook are largely based on policy documents and companies' perspectives.

- In ELCA, indicators such as GWP are based on (natural) science (although selected based on interest etc.).

Literature review and content analysis

1. First 1000 hits on www.sciencedirect.com when searching for working hours and child labour/labor.

2. Further scrutiny based on title, abstract, and content. Down to +10 articles per indicator.

3. Does increase/reduction in social topic *X* cause/prevent any benefits/harm *Y*?

"Bad" and "good" forms of child labour ... and even worse activities

Several reports of harmful child labour due to stress, health problems, abuse, etc.

Several reports of beneficial child labour due building of character, learning discipline and punctuality, etc.

Several reports of reduced child labour leading to unwanted consequences, such as worse work, child soldiers, etc.

Similar statements about child labour in other studies in the SLCA field

"[C]hild labour is regarded as a feature of supply chains to be eschewed; this is a valid judgment if the alternative to child labour is education, but not obviously valid if the alternative is child prostitution or enforced military service."

Clift et al. (2013)

"[T]he mere fact that a child is working tells little about how this may damage or benefit […] implying that the normally used indicator; 'incidence of child labour' lacks validity in relation to predicting damage or benefit [...]"

Jørgensen et al. (2010)

Working hours – an inverse U curve

Working little or none:
- Unemployment
- Loss of income
- Loss of status
- Etc.

Optimal level – highly individual
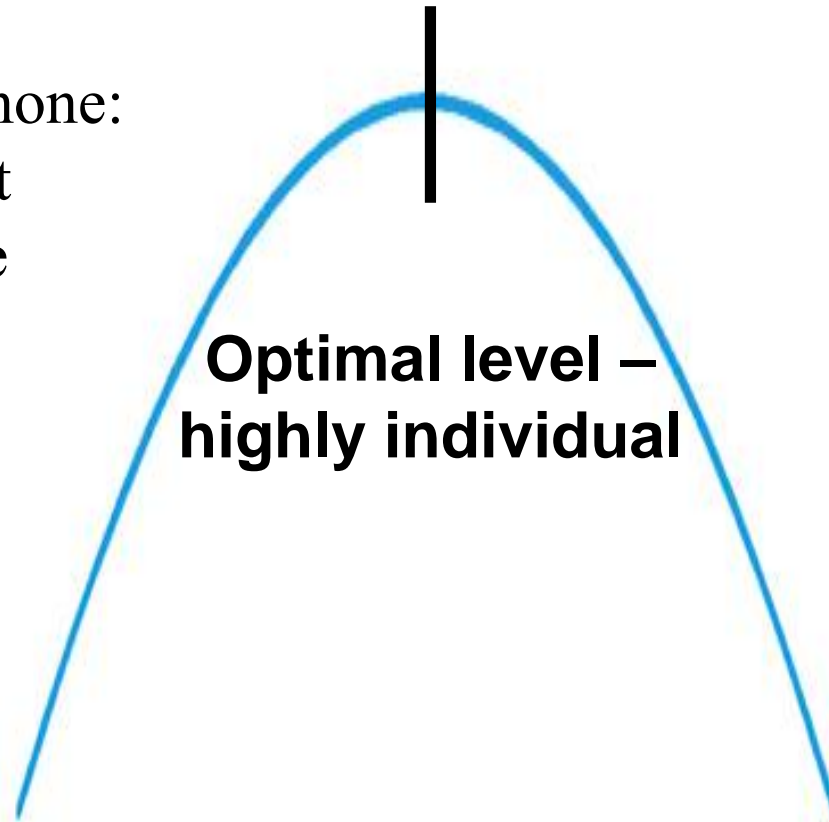
Working much:
- Stress
- Health problems
- Etc.

Conclusions

- Both working hours and child labour were found to be highly ambiguous, since they both caused and prevented benefits and harm if increased/reduced.

- There seems to be no scientific justification for merely saying that working hours and child labour are "bad" or "cause harm".

- One way forward could be to develop more specific social topics/indicators that better capture adverse (or beneficial) impacts only.

Outlook

Our findings are from social science and economics, such as:

- development studies,
- ergonomics,
- anthropology,
- labour economics,
- development economics.

We find it likely that social science and economics contains additional valuable insights for the development social indicators in SLCA.