

Systematic Reviews on ICT impacts: Have we made a difference?

Rohan Samarajiva & LIRNEasia Systematic Review

Teams



This work was carried out with the aid of a grant from the International Development Research Centre, Canada and the Department for International Development UK..



About LIRNEasia

- Our mission:
 - *“Catalyzing policy change through research to improve people’s lives in the emerging Asia Pacific by facilitating their use of hard and soft infrastructures through the use of knowledge, information and technology.”*

Countries that we engage with



A Systematic Review

- Uses ***explicit methods*** to ***identify, select,*** and ***critically appraise*** relevant research and ***summarize*** data from those studies that are included in the review
 - Biased towards quantitative to begin with, but now moving towards mixed methods and qualitative
- Originally from the field of medicine, now includes social sciences
- Uses only primary studies
- Protocols are registered
- Peer review is mandatory and has teeth

Why SRs?

- The justification of spending significant amounts of time, money and effort on SRs **is not to ensure that the dwarf climbs on the shoulders of the tallest giant.*** It is to ensure that the most robust research findings on a question of public policy are identified; that policy makers are provided with the best-possible knowledge stripped of bias as much as possible.
- *Rationale for literature reviews, most famously stated by Sir Isaac Newton drawing from Bernard of Chartres

LIRNEasia's experience with SRs

- Initially got into it in 2011
 - 3ie funding and training → Mobiles & rural impact, not discussed today
- Received IDRC funding in 2014 for 3 SRs and capacity building
 - 70+ researchers introduced to systematic reviews (CPR*south* 11, in 2014)
 - 40 researchers taught systematic reviews in depth
 - 15 researchers engaged in systematic reviews
 - 3 SRs on impacts completed, discussed today → Education, mobile financial services & MSME
- Currently working in partnership with DFID and PwC India to build further capacity in South Asia: Training, help with formulation of protocols, etc.

What have we done to take SRs to policy?

- Taking research to policy is wired into the DNA of LIRNEasia
- Expert forums, with impressive lists of participants, were conducted for each of the SRs in
 - Colombo, November 2015 (ICTs in the classroom)
 - New Delhi, April 2016 (ICTs and MSME)
 - Manila, July 2016 (Mobile financial services)
- Given the nature of the results, we believed communication of the results to experts and stakeholders would be more effective than to the media
 - Failed to attract interest in countries other than that within which the researcher was located
 - Lack of receptiveness from media

Direct quotation from a senior Indian journalist who has been very receptive to LIRNEasia research in the past

- *“I thought the impact of mobile phones on economy by now was a well-established fact. I saw the documents you sent. Didn't find anything new.”*

Impacts

- In all cases, researchers established potentially productive relationships through the expert forums
 - Independent of SRs, though the command of the subject displayed through the presentation of SRs helped
- Expert forum on ICTs in Classroom yielded an invitation to meet with a senior decision-maker inviting the researcher to an urgent meeting to follow up, but meeting never happened because of other factors
- Expert forum on ICTs & MSMEs yielded
 - Requests for reports by large industry bodies
 - A statement from the attendee from Facebook that they would incorporate into their work the finding that one year was not adequate to see results

Four challenges in taking SRs to policy

1. Synchronizing with policy windows

- Taking research to policy in an effective manner requires understanding and exploiting policy windows (Kingdon, 1984)
 - Some are predictable (e.g., new decision makers assuming office after an election)
 - Others are not (e.g., a crisis)
- Rarely is there adequate time to commence research from scratch
- Effective exploitation of policy windows requires some kind of prescience in guessing what kinds of research would be required for the kinds of policy windows that are likely to open up.
- When policy windows open, we can
 - Mobilize the resources and conduct the research [Not feasible for SRs]
 - Repurpose research done for another reason [e.g., SR on a related topic]
 - Assemble existing research done by others [e.g., SR done for use in another country]
- **But whatever is done, must be done before the policy window closes**

2. Perceived obsolescence

- Research becomes stale, because of events as well as because of advances in theory and research methodology
- A SR where the most recent primary study is several years old, would suffer from publication bias
- Time-constrained decision makers tend to use heuristics to decide what research they give a hearing to
 - They may decline to pay attention to SRs, on grounds of perceived obsolescence if latest research reported is more than 2-3 years old

3. Lack of contextualization

- When it comes to policy-relevant knowledge, context matters
 - Basic principles do not vary from country to country
 - But knowledge that is policy relevant is not abstract
 - Causal mechanisms may be same, but enabling conditions will differ
- If systematic reviews lack country context, it is easier to use them in multiple countries where policy windows may open up
- But in each case, it will be sub-optimal because the bridge between the conditions specific to the policy window is missing
- One solution:
 - Continue to conduct systematic reviews that are not country-specific, but to supplement them with “bridging studies” (that connect to specific context of policy window, if possible)

4. Administrative culture in non-health domains

- In healthcare field, long tradition of randomized controlled trials
- In the policy domains covered by our SRs, tradition is one of making do with imperfect evidence → no demand for the rigorous evidence produced by SRs

Domains contrasted

Healthcare

- Long tradition of RCTs
- Patients die, if wrong medicines/procedures used
- Human bodies similar, for most part (enabling conditions less significant)
- Institutional arrangements well established at least in developed countries for
 - regular commissioning of SRs
 - their management
 - demand-led communication of the findings to those who make final decisions on medical treatments & practitioners

Other

- Short/no tradition of RCTs
- Consequences not seen as that serious
- Enabling conditions more important in socio-economic systems
- No domestic institutional arrangements in place; current SRs are being “pushed” by external actors