Evidence in Policymaking

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Outline

• **Why** do evidence based policy?
• **How** to do evidence informed policy?
• Implications for research and researchers
• Policy as a career
• Asks of the research community
Why do evidence based policy?

As a policy maker, as a researcher
We are far from production possibility frontier
National rural employment guarantee, India

**Innovation:** New fund-flow system from state directly to village council

**Program:** $6bn, 33m beneficiaries

**Evaluation:** 24% decline in expenditure, no fall benefits

**Scale up:** 21 states

Mass free distribution of bednets

- 450 million fewer cases of malaria from 2000-2015
- 4 million fewer deaths

But its all political bargains, nothing changes......

.........except when it does.
Politics is more movable than you might think

High correlation between vote shares for political parties and ethnic composition of districts. Casey 2015.
Politics is more movable than you might think

Vote shares of major parties across strongholds

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2007</th>
<th>2012</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>APC</td>
<td>APC</td>
<td>APC</td>
<td>APC</td>
</tr>
<tr>
<td>North west</td>
<td>52.8</td>
<td>76.8</td>
<td>89.8</td>
<td>69.4</td>
</tr>
<tr>
<td>South east</td>
<td>2.8</td>
<td>9.5</td>
<td>18.9</td>
<td>10.8</td>
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<td></td>
<td>SLPP</td>
<td>SLPP</td>
<td>SLPP</td>
<td>SLPP</td>
</tr>
<tr>
<td>North west</td>
<td>32.8</td>
<td>17.1</td>
<td>6.4</td>
<td>11.1</td>
</tr>
<tr>
<td>South east</td>
<td>94.5</td>
<td>56.2</td>
<td>75.2</td>
<td>82.9</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North west</td>
<td></td>
<td></td>
<td></td>
<td>14.1</td>
</tr>
<tr>
<td>South east</td>
<td></td>
<td></td>
<td></td>
<td>2.4</td>
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</table>
DIV innovations reaching > 1 million beneficiaries

**Voter report cards**
- 10 million reached
- India

**Dispensers for safe water**
- 2.3 million reached
- Kenya, Uganda, Malawi
- Annual net benefits $30m

**Election monitoring technology**
- 6.5 million reached
- Afghanistan, Kenya, Uganda, South Africa,

**Digital attendance monitoring**
- 1.8 million reached
- India

**Road safety stickers**
- 3 million reached
- Kenya, Uganda, Tanzania
- Annual net benefits $13.9m

**Psychometric credit assessment**
- 1 million reached
- $1.5 billion in loans facilitated
- 15 countries

DIV made 43 awards from 2010-12 totally 17million. Just taking 3 investments generated at least $3 in social benefits for every $1 in costs incurred and at least a 39% return on investment – likely significantly higher, given conservative assumptions.
How to do evidence based policy?

Substance and style
Policy makers constrained by cognitive bandwidth

• Evidence use is a classic behavioural economics problem
  • It has high payoff but uptake is below optimal
  • Short term cost, long term gain

• Behavioural insights useful to promote evidence uptake
  • Make it easy and cheap for policy makers to apply it
  • Salience matters (hearing it once isn’t enough)
  • Framing matters, use their language not yours
Bring your whole tool box

Context/institutional knowledge

Well identified causal evidence

Descriptive data

Theory

Thus total demand $D(p, \mu)$ is

- $D(p, \mu) = (Y_2 + Y_1) / p$ if $p < \mu$
- $D(p, \mu) = Y_2 / p$ if $\mu < p < 3\mu / 2$
- $D(p, \mu) = 0$ if $p > 3\mu / 2$. 
1. Representative survey data (DHS, LSMS etc)
2. Administrative data (tax data, number schools)
3. Results from qualitative interviews
4. Institutional info (incl pol econ)

1. Good theory for behaviour change.
2. Descriptive data/correlations that are consistent with theory
3. Rigorous causally identified studies which test and support the theory

1. Is it possible to implement proposed program given local constraints
2. How should design details be modified to adapt to local conditions?
Improving learning: diagnosing the problem

Children’s learning in grade 9 ranges from grade 3-7

"Disrupting education" Muralidharan et al 2017
Tracking and remedial education are effective.
Textbooks worked for the top of the class
Designing implementation details for Zambia

Mahuba Hazemba (Senior Officer, Ministry of General Education’s Directorate of Standards) helps a student with a TaRL exercise.
Low take-up of late in schedule immunisations

<table>
<thead>
<tr>
<th>Immunization rates by antigen</th>
<th>Country 1</th>
<th>Country 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPT1</td>
<td>84</td>
<td>47</td>
</tr>
<tr>
<td>DPT3</td>
<td>74</td>
<td>41</td>
</tr>
<tr>
<td>Measles</td>
<td>67</td>
<td>41</td>
</tr>
<tr>
<td>Fully immunized</td>
<td>49</td>
<td>38</td>
</tr>
</tbody>
</table>
RCT of incentives for immunization

Substantial evidence on incentives

- 30+ RCTs of CCTs but usually much bigger incentives (Fiszbein and Schady, 2009)

- Malawi: smaller CCT same impact as bigger CCT (Baird et al 2010)

- Small incentives for HIV testing (Thornton 2008 Malawi), age of marriage (Field et al, in progress Bangladesh)
Price sensitivity of preventative health

Dupas, 2011 (updated to include more recent studies)
A theory for behavior change: present bias
Implementation methods vary

Kenya

Gibson et al 2017

Sierra Leone

World food program, J-PAL Africa

Pakistan and India

Chandir et al, ongoing.
Duflo et al, ongoing
Evidence based policy is not about this....
Incentives for immunization program

Local conditions
1. Parents want to vaccinate
2. Parents can access clinic
3. Provider presence sufficient
4. Full immunization schedule is salient

Generalized lessons on behavior

Local implementation
1. Incentives delivered to clinics
2. Incentives delivered to parents

Completed immunization rates rise

- Minimal risk from overvaccination
- Parents procrastinate or fail to persist
- Parents are highly sensitive to price of preventative health

It's this....
Implications for researchers
Implication: policy engagement not presentation
Implication: do theory based literature reviews

• Systematic reviews that count number of positive results in an area can be very misleading

• Theory based reviews can be more useful
  • Bring together evidence from different evaluations that are consistent with an underlying theory

• Need more overviews that bring out the underlying behaviours found across a literature
  • This is what generalises

• Note: if you don’t think anything generalises you are in the wrong business
Implication: external validity debate is confused

• The question “does this result generalize?” is three questions
  • Is the problem an issue elsewhere?
  • Does the underlying behaviour generalize?
  • Can the policy be implemented in this context?
    • Do some of the details need to be adapted
Making policy/research partnerships work

Researchers need to
• Answer questions the partner wants answered
• Be flexible about evaluation design
• Share expertise
• Provide intermediate outputs
• Have a local presence and keep in frequent (constant) contact

Good policy partners
• Work at sufficient scale
• Are flexible
• Implement a representative program
• Have local expertise
• Have low staff turn over
• Care about knowing the truth

Glennerster, in Handbook of Field Experiments, 2017
Glennerster and Takaravasha,
Doing evidence based policy as a career

<table>
<thead>
<tr>
<th>Academia</th>
<th>Policy</th>
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<tbody>
<tr>
<td>Lond deadlines</td>
<td>Short deadlines</td>
</tr>
<tr>
<td>Self motivate</td>
<td>Good in teams</td>
</tr>
<tr>
<td>Being novel</td>
<td>Being right</td>
</tr>
<tr>
<td>Direction of effect</td>
<td>Magnitude of effect</td>
</tr>
<tr>
<td>Convince economists</td>
<td>Convince noneconomists</td>
</tr>
<tr>
<td>Find a question you can</td>
<td>Answer the question</td>
</tr>
<tr>
<td>answer well</td>
<td>as well as you can</td>
</tr>
<tr>
<td>Become an expert on one issue</td>
<td>Apply your tools to many issues</td>
</tr>
<tr>
<td>Find the optimal</td>
<td>Optimize within constraints</td>
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</tbody>
</table>
Ask of researchers

• Do high quality policy relevant research that both speaks to important theory (ie has generalizable lessons) and engages with details
  • Economist as plumber
• When discussing results with policy makers see their perspective
  • understand their interests
  • use their language
  • talk about the body of work not just your study
• Write pieces that synthesise the implications of body of research that brings out the underlying common patterns of behaviour
  • Theory but in accessible language
If we are not bring evidence to policy, why are we here?