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Impact Evaluation for Real Time Decision Making
# The Heat of the Moment...

Ariely and Loewenstein (2005)

<table>
<thead>
<tr>
<th>Question</th>
<th>Non-aroused (%)</th>
<th>Aroused (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can you imagine ...being attracted to a 12 year old?</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>...having sex with a 60 year old woman?</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Is just kissing frustrating?</td>
<td>41</td>
<td>69</td>
</tr>
<tr>
<td>A condom decreases sexual pleasure</td>
<td>66</td>
<td>78</td>
</tr>
<tr>
<td>Would you always use a condom if you did not know the sexual history of</td>
<td>88</td>
<td>69</td>
</tr>
<tr>
<td>the partner?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would you use a condom even if you were afraid that the woman might</td>
<td>86</td>
<td>60</td>
</tr>
<tr>
<td>change her mind while you went to get it?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Impact of family illness on self reported sex worker behavior

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Change in the probability of behavior (%) on days in which a family member falls ill</th>
</tr>
</thead>
<tbody>
<tr>
<td>See a client</td>
<td>3.2</td>
</tr>
<tr>
<td>Have anal sex</td>
<td>21.7</td>
</tr>
<tr>
<td>Have unprotected sex</td>
<td>20.6</td>
</tr>
</tbody>
</table>
Open questions

- Do we understand why people do the things they do?
- Prevention in HIV/AIDS is predicated on knowing the right answer
- Do people do what they know is right?
- Do we need to rethink how prevention work if knowledge alone is not enough?
If knowledge is not enough...

- Contingent transfers
  - Scholarships to stay in school in Kenya
  - Cash transfers conditional on staying HIV negative in Tanzania
  - Health insurance for sex workers?

- Precommitment strategies
  - Legislate condoms in hotel rooms (Eritrea)
  - Abstinence?
  - Carrying condoms?
What does impact mean?

- The word impact is often misused as a synonym for higher-level outcome.
- Impact originally means “effect of something onto something else.”
- Here impact is the portion of the observed change in an outcome caused by the intervention of interest.
Counterfactual analysis to single out the causal effect of an intervention on an outcome

- Compare same individual with & without “something” at the same point in time
- Estimate counterfactual: find a control or comparison group

Counterfactual Criteria

- Treated & counterfactual groups have identical initial average characteristics
- Only reason for the difference in outcomes is due to the intervention
What is monitoring?

Trend analysis

- Change over time
- Compare results before and after on the set of individuals with “something”

![Diagram showing trend analysis with before and after comparisons.

- Y-axis represents a metric.
- t₀ and t₁ represent time points.
- Treatment and Impact indicators.]
Monitoring and Impact Evaluation

- Monitoring to track implementation efficiency (input-output)
- Impact evaluation to measure effectiveness (output-outcome)

Monitoring Efficiency

Inputs

Outputs

Outcomes

Evaluate Effectiveness

$\text{BEHAVIOR}$
Question types and methods

- M&E: monitoring & process evaluation
  - Is program being implemented efficiently?
  - Is program targeting the right population?
  - Are outcomes moving in the right direction?

- Impact Evaluation:
  - What was the effect of the program on outcomes?
  - How would outcomes change under alternative program designs?
  - Is the program cost-effective?
When would you use M&E and when IE?

- Are conditional cash transfers being delivered as planned? ➤ M&E
- Does peer-to-peer increase awareness? ➤ IE
- What are the trends in HIV prevalence? ➤ M&E
- Does HIV testing affect prevention behavior? ➤ IE
Nutrition & Early Child Development in Uganda

- Strong impact evaluation results
  - children in treatment scored half a standard deviation better than children in the control

- Failed project
  - Project ran into financial difficulties
  - Parliament negative reaction

- Intervention stopped

- Recently, Presidency asked to take a second look at the evaluation: *saving the baby?*
Why Evaluate?

- Improve quality of programs
  - Separate institutional performance from quality of intervention
  - Test alternatives and inform design in real time
  - Increase program effectiveness
  - Answer the “so what” questions

- Build government institutions for evidence-based policy-making
  - Plan for implementation of options not solutions
  - Find out what alternatives work best
  - Adopt better way of doing business and taking decisions
Institutional framework

PM/Presidency:
Communicate to constituencies

Line ministries:
Deliver programs and negotiate budget

Cost-effectiveness of alternatives and effect of sector programs

Treasury/Finance:
Allocate budget

Cost-effectiveness of different programs

Effects of government program

CAMPAIGN PROMISES

SERVICE DELIVERY

Accountability

BUDGET
Shifting Evaluation Paradigm

- From retrospective, external, independent evaluation
  - Top down
  - Determine whether program worked or not

- To prospective, internal, and operationally driven impact evaluation /externally validated
  - Set program learning agenda bottom up
  - Consider plausible implementation alternatives
  - Test scientifically and adopt best
  - Just-in-time advice to improve effectiveness of program over time
Bottom up requires capacity development for IE in implementing agencies
- Some formal training
- Mainly application and learning by doing by being part of the evaluation team

Objective
- use impact evaluation as an internal and routine management tool
- secure policy feedback
Operational questions: managing for results

- Question design-choices of program
  - Institutional arrangements, Delivery mechanisms, Packages, Pricing/incentive schemes
- Use random trials to test alternatives
- Focus on short term outcomes
  - take up rates, use, adoption
- Follow up data collection and analysis
  - 3-6-12 months after exposure
- Measure impact of alternative treatments on short term outcomes and identify “best”
- Change program to adopt best alternative
- Start over
Policy questions: accountability

- How much does the program deliver?
- Is it cost-effective?
- Use most rigorous method of evaluation possible
- Focus on higher level outcomes
  - educational achievement, health status, income
- Measure impact of operation on stated objectives and a metric of common outcomes
  - One, two, three year horizon
- Compare with results from other programs
- Inform budget process and allocations
Shifting Program Paradigm

From:

- Program is a set of activities designed to deliver expected results
  - Program will either deliver or not

To:

- Program is menu of alternatives with a learning strategy to find out which work best

- Change programs overtime to deliver more results
This is a technical assistance product to change the way decisions are taken.
It is about building a relationship.
Adds results-based decision tools to complement existing sector skills.
The relationship delivers not one but a series of analytical products.
Must provide useful (actionable) information at each step of the impact evaluation.
Empower clients to learn and adopt technologies that work.

Build knowledge and work with operations to scale up success.
Working with 86 agencies in 28 countries

65 experimental
21 non-experimental
AIM Capacity Development

- Creation of learning teams within the national agencies
- Develop pool of local researchers
- Multi-Country Workshops learn & apply / thematic model
  - Pilot Aug 2005 - East Africa Seminar, Mombasa, Kenya
  - Ethiopia 2006, South Africa 2006
  - Malaria 2007, Education 2007
  - HIV & Malaria 2008, Education 2008
  - HIV 2009, Agriculture 2009, Community Driven Development 2009
- In Country Workshops
- South-to-South collaboration and virtual network of practitioners and researchers
- North-to-South partnerships
  - Harvard, MIT, Berkeley, UCL, LSHTS, IFPRI
AIM Joint Impact Evaluations

- Develop team
  - Counterpart, project and research working together throughout design and implementation

- Facilitate design & implementation of evaluations
  - Moderate process of critical thinking about government program
  - Identify policy questions, evaluation design, timeline and budget, and prepare concept notes and funding proposals
  - In-country stakeholders consultations, registration of trials and clearance with national authorities
  - Place field coordinator for day-to-day implementation support
  - Implementation modalities, guidance for data collection, management and analysis
AIM Programmatic quality support

- Coordinating unit

- Technical Advisory Group
  - Develop and harmonize methods, instruments and best practice approaches
  - Clearing function for design and data collection protocols
  - Ongoing monitoring
  - Intervention in case of quality failures
  - Summarize lessons learned in materials that are accessible and relevant (AIM website, papers, policy notes)
AIM Thematic Programs

- **AIM-CDD  Community-Driven Development**
  - 8 countries, implementation stage

- **APEIE  Africa Program for Education Impact Evaluation**
  - 12 countries, implementation stage

- **MIEP  Malaria Impact Evaluation Program**
  - 7 countries (AFR/SAR), implementation stage

- **AIM-AIDS  HIV/AIDS Impact Evaluation Program**
  - 8 countries, preparatory stage

- **AIM-ECD  Impact Evaluation of Early Childhood Development**
  - 4 countries, preparatory stage

- **AIM-Water Impact Evaluation of Water Supply**
  - 8 countries (AFR/LAC), preparatory stage

- **AADAPT  Agricultural Adaptation**
  - 5 countries in preparation, 10 countries discussion stage
Advantages of multi-country impact evaluation programs

- Secure coordinated policy learning agenda
  - address knowledge gaps

- Improve comparability and generalizability of findings
  - harmonization of measurement

- Cost-effectiveness through pooling of resources

- Technical advisory groups provides
  - governments with access to the best available expertise in a thematic field
  - a strong mechanism for quality assurance

- Facilitate the implementation of effective multi-country capacity development strategies

- South-south exchange and knowledge sharing
Objectives
- Build rigorous country-level evidence
- Build technical and institutional capacity
- Focus on national priorities

Co-leadership
- ActAfrica
- Africa Impact Evaluation Initiative/Development Impact Evaluation Initiative
Focus on prevention
- Do our prevention strategies work?
- Are some approaches better than others?
- What innovations should we test to inform the next generation of projects?
AIM-AIDS themes and countries

- Information campaign
  - Benin
  - DRC
  - Mauritania

- Peer-to-peer communication
  - Eritrea

- VCT services
  - Kenya

- Testing
  - Ivory Coast
  - Malawi

- Conditional Cash Transfers
  - Tanzania
  - Burkina Faso

- Treatment
  - South Africa
  - Kenya
Thank You