Ethics in Experimental Research

Scott Desposato
UCSD and UZH

Summer Institute
June 2015

BITSS
Berkeley Initiative for Transparency in the Social Sciences

Topics for Today

- There are some real ethical issues associated with many of the things we are doing today. These are especially common when working overseas.
- Existing institutions - including our IRB's - don't provide sufficient guidance. Indeed, that's not their mission!
- Whether or not we are willing to admit it, self-interest can restrict our ability to assess ethics impartially.
- I will identify some of the issues, with examples, and discuss the different opinions on emerging ethical issues.
- I will also offer suggestions for avoiding trouble, but these come with a cost.

Ethical issues in Social Science???

- "You've got to be kidding me!?!"
- Treatments are almost always fully legal activities that subjects might encounter in their daily lives. What's the big deal?
- Many experiments in the past were limited to laboratory environments with little deception, full debriefing, and no impact on the real world.
- The real risk to our subjects: boredom

One Measure of Risk

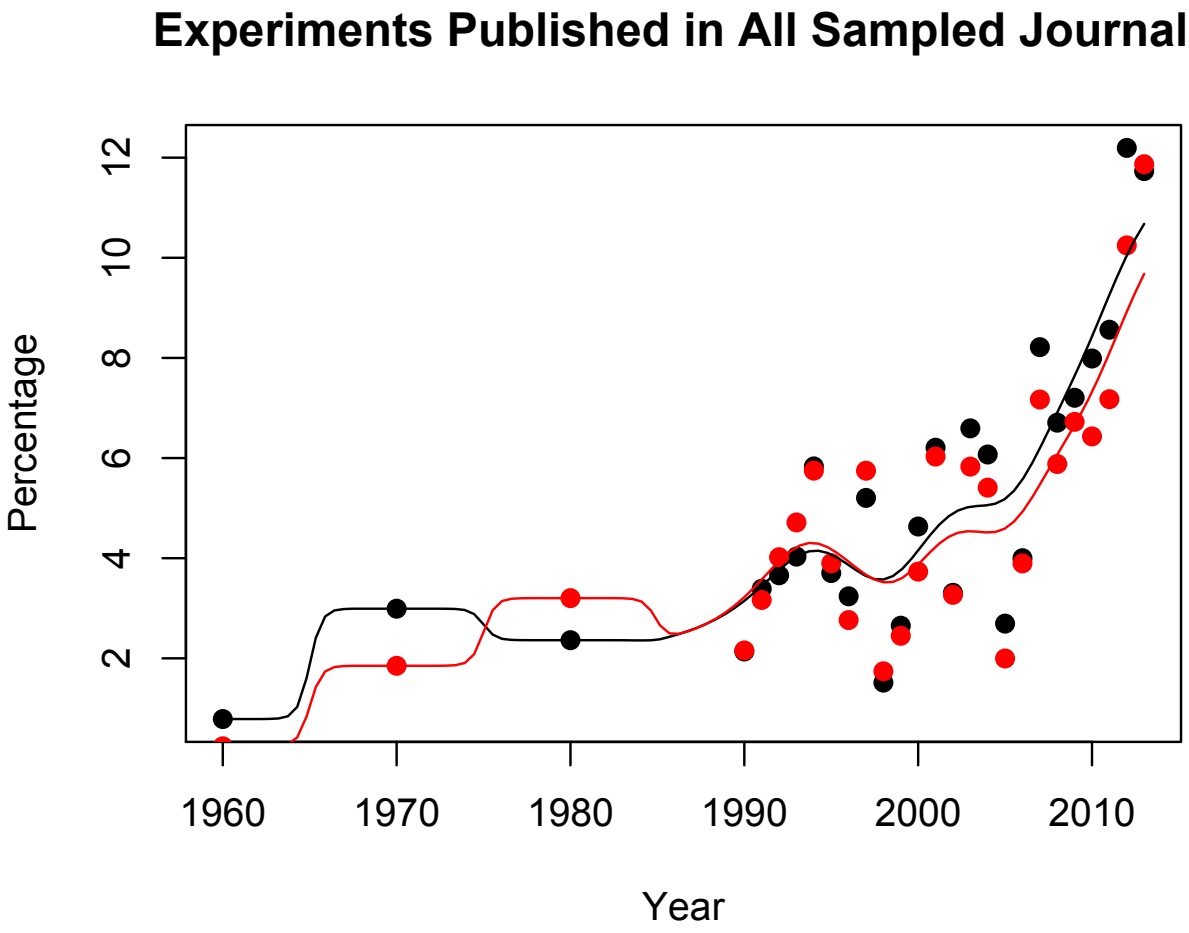
Authors	30
Total Subjects	104,000
Adverse Incidents	1
Reports of Harm	0

Source: Plott, 2013, http://sites.nationalacademies.org/DBASSE/BBCSS/CurrentProjects/DBASSE_080452\#.UYA_Rit37Iw

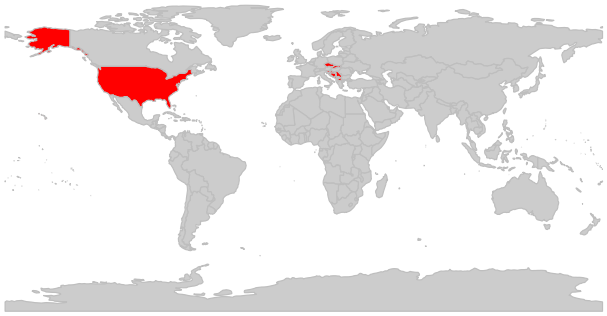
What's Changed?

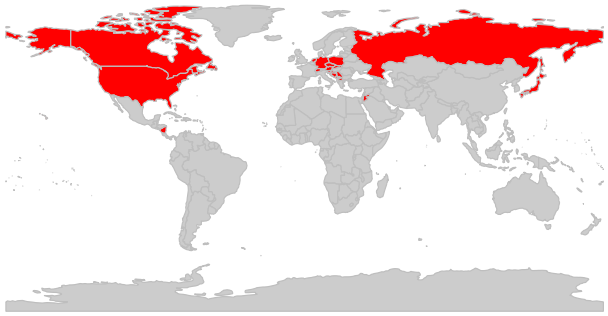
- Number of Experiments: Social scientists are conducting more and more experiments, and they are bigger and bigger.
- Location of Experiments: These experiments are not just in the United States anymore, but have spread across the globe.
- Type of Experiments: We aren't just having undergrads play Dictator Games in class for extra credit.
- Some Data: AJPS, APSR, JOP, IO, JCR, CPS, CP; 1990-2013 and 1960, 1970, 1980

What's Changed? More Experiments

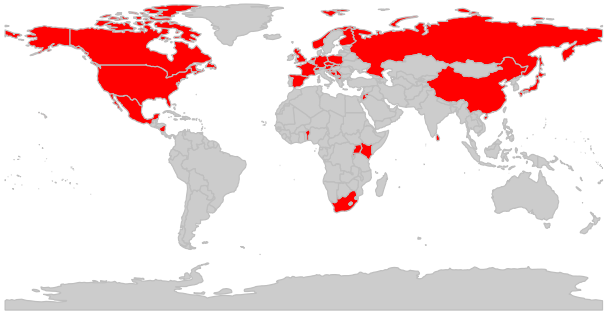


What's Changed? New Contexts

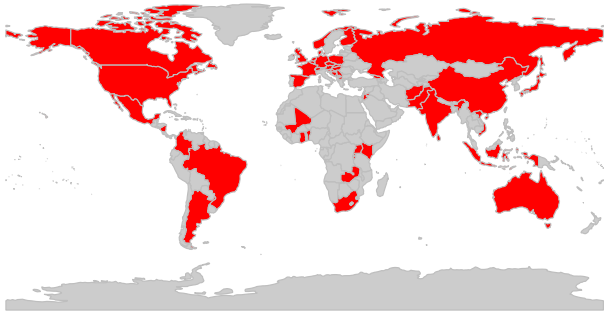




2000's



2010's



What's Changed? New Methods

Decade	Laboratory	Survey	Field
1980*	6.0	0.0	0.0
1990s	6.0	0.0	0.0
2000s	5.8	2.9	0.2
2010+	10.5	19.25	5.5

What's Changed? New Problems

- Contextual: We are conducting experiments in entirely new cultural, religious, economic, and security environments with unexpected risks.
- Foreign Review: There are complex legal issues associated with conducting experiments overseas that most scholars are ignoring.
- Field Experiments: Field experiments hold great promise for scientific progress, but mean we have large numbers of uninformed, unconsenting subjects and bystanders.

A Few Examples

- Several scholars are conducting field experiments during campaigns in Brazil. They provide campaign information on a large scale – to as many as 100,000 subjects. Neighborhoods are randomized to different messages, and impacts are measured in election results.
  - When we intervene in real elections there's a chance we many affect real outcomes for millions of bystanders.
  - Subjects are unconsenting and uninformed
  - The treatments are illegal under Brazilian campaign laws
  - Brazil has national regulations governing research with human subjects – and none of the scholars involved has complied. So the study was also illegal for that reason.

A Few Examples

- PI's paid confederates to commit traffic crimes in front of police officers, to learn about bribe-seeking as a function of social class
  - Uninformed and unconsenting subjects
  - Bystanders potentially exposed to safety risks
  - No local approval
  - Treatment was illegal and attempted to incite additional illegal activity.
  - PI used US funds to commit crimes in a foreign nation. Is the host university guilty of conspiracy?
  - This one didn't lead to a cure for cancer.

A Few Examples

- PI's worked with an NGO to publicize randomly selected legislators' attendance records in an authoritarian country. The results included changes in legislative behavior and career paths.
  - Public officials don't enjoy IRB protections, and technically the NGO did the randomization, so no one is going to jail.
  - Who is a public official in an authoritarian country? Are party-selected individuals the same as US elected officials? Or are they private citizens?
  - Getting someone else to do our randomization might protect us from litigation, but if we caused the intervention, are we really off the hook?
  - Millions of constituents were affected by legislators' reallocation of time, and we never asked them for approval

Thinking about Solutions

- Each of these has both a practical and an ethical dimension.
- Practical: Are there easy and low-cost design changes we can make to avoid issues all together?
- Ethical: Whether or not there are alternative strategies, do we have any ethical obligation to modify our designs or perhaps skip the experiment all together?

What's At Stake

I've encountered quite a bit of resistance to even discussing these issues, with a strikingly uniform response: "Don't Shut Us Down!"

My response: unconstrained ambition will shut us down.

- There is risk of real harm to subjects, bystanders, collaborators, and investigators.
- A single scandal could quickly end our access to a specific population, an entire country, of cut off funding. Political Science already has enemies in Congress; do we want to upset more of our principals?
- Don't forget that experimentalists remain a minority of political science, public policy and economics.

Plan for the Rest of This Session

Contextual Problems

Local Review

Field Experiments

For each area:

What are the critical issues, and what is the range of opinion on them?

In some cases, I'll offer my opinion and recommendations.

1. Context

- Cultural, economic, and religious norms mean that our simple and safe treatments may be extremely high risk in other environments.
- These problems are sometimes "easy" – in two ways
  - There's clear agreement that the issue is a problem
  - There are often practical and easy ways to solve these problems.
- Let's consider just three:
  - Religious norms and lab experiments
  - Inequality and compensation
  - Violence and everyday risk

Context: Religion

- Standard economic games that involve chance may violate Islamic prohibitions on gambling.
- Risks: stressful experience for subjects that may have some social costs. Possible backlash against PI and institution.
- One solution (Becky Morton): Instead of "betting" on numbers, design the experiment around "finding the best route through traffic". Of course, transit times are random variables.

Context: Inequality

- Even modest compensation to subject may generate resentment, may divide communities, or may lead to violence in impoverished settings.
- Sampling and lotteries, which may seem fair to those who have training in probability, may not seem fair to those on the receiving end.
- In some countries, compensation of subjects is illegal.
- Proposed Solutions:
  - Extended discussions and explanations of sampling with entire population
  - Single payment to entire community.
  - If no alternative: give compensation to a local charity.

Context: Violence

- In many places, just talking about politics is dangerous. An insecure environment may place investigators, enumerators, and subjects all at risk.
- Enumerators have been kidnapped in Mexico and have faced lynch mobs in Guatemala.
- Cambodian political bosses have threatened survey respondents.
- Participation in surveys has reduced turnout in unconsolidated democracies.

Context: Violence

- In dangerous places, is risk of violence a normal part of daily day life that we don't need to consider?
- Yes. There is a risk of violence, but it is part of daily life. Enumerators and subjects are free agents that can choose to participate or not. Alternative employment opportunities may be riskier. And, the research is worth it.
- No. Research should never be the cause of violence against enumerators or subjects. Both are subject to undue influence from foreign PI's. Extensive precautions should be taken. Everyday risk should incorporate subjects and PI's context.

2. Local Review

- Many university IRB's don't require social scientists to demonstrate host country approval of research protocols. NSF also does not ask us for this.
- However, many countries have local rules – sometimes laws – that govern the conduct of research. Research by foreigners often gets special scrutiny.
- Scholars in many countries are simply ignoring those laws, flying in on tourist visas, running experiments, and heading home with data.
- Note that this would be perfectly legal in the United States because regulations have limited application.

Local Review

- When conducting experiments overseas, do we have an obligation to comply with host nation's laws regarding human subjects?
- What if there is a foreign IRB, but
  - No one else is using it.
  - The IRB is incompetent.
  - The IRB is corrupt.
  - The IRB exists to protect the regime, not the subjects
- Let's consider three cases: China, Malawi, and Brazil

Authoritarian Regimes: China

- Number 7 Decree (Rules Concerning Investigation with Foreign Participation) by the National Bureau of Statistics of China
- This decree governs market as well as social research.
- Foreign involvement means that the study is funded by or in cooperation with foreign individuals or entities.
- Foreign involvement requires a license to carry out a study.
- Risks: fines, revoking license, and criminal prosecution.
- Rules described as intentionally ambiguous to empower the state

Authoritarian Regimes: China

- Practical strategies for China:
  - Collaborate with government or academic institutions
  - Independent research without approval
  - Commercial market research firms
  - Internet surveys
- There is an informal equilibrium among experimentalists – and fear that someone will "kill the golden goose"
- Full compliance will restrict research to only areas that favor the state.
- The risks are almost entirely on local collaborators. Chinese scholars report that subjects and foreign researchers are unlikely to suffer any consequences.

Democratic Regimes: Malawi

- Lots of experience with research; subjects often want to skip the informed consent, since they know it so well.
- Local and home review are required by an appropriate ethics review board.
- Scholar must affiliate with an approved local institute.
- The use of local enumerators is required, and has caused some additional ethical problems.
- Projects must include training, scholarships, mentorship, co-authorship, data access, and acknowledgments.
- Fees: 10% of the project budget
- The consequence of noncompliance, and the compliance rate, are not clear.

Democratic Regimes: Brazil

- Brazil has a clear and well-developed IRB system codified into administrative law.
- There is a centralized hierarchy of IRB with a national committee in the Ministry of Health (CONEP) that certifies and supervises local CEP's at universities.
- Most studies can be quickly approved by a local CEP - unless they are especially high risk (medical, experimental, or .... have foreign involvement)
- Fortunately, rules require 30-day turn-around by CEP, and 60-day by CONEP
- Compensation of subjects is illegal
- Local affiliation is required as is technology transfer.

Brazil – Our Experience

- We sought approval for a survey experiment where voters chose a preferred candidate from a set of hypothetical profiles. We were exploring race, gender, and choice set effects.
- UCSD approved the study 21 days after we submitted our application.
- Preliminary approval from the Brazilian system took more than a year.
- In the interim, others published similar work without any review.
- The Brazilians are trying to revise their procedures.

Foreign Review: Opinions

- Consensus:
  - Informal local review is always appropriate
  - If it's easy and manageable, comply with formal local review
  - Procedures that are corrupt or improperly motivated don't deserve as much respect.
- Disagreement
  - What should we do in cases like Brazil – a consolidated democracy with a clear – if lengthy review process?
- My opinion – it's often worth trying to comply.
- If you decide to try a "black ops experiment", carefully consider the risks to yourself, enumerators, subjects, the discipline, and possibly to diplomacy. In most cases, scholars report the greatest risk is to your local partners.

3. Field Experiments

Field Experiments move the manipulation out of the lab and into the "real world".

Examples:

- Assign a public good to some villages and observe performance or political outcomes.
- Send subjects a campaign message and observe turnout or voting behavior
- Pretend to be constituents and ask legislators for help or information. Or – pretend to be students and ask faculty for something.

Field Experiments: Issues

Most criticism of FE's focuses on spillovers

- Impact / Spillovers: Field experiments have real world impacts on very large numbers of people, both subjects and bystanders.

However, the more important issue is informed consent.

- Informed Consent: Subjects and bystanders who are affected have not voluntarily agreed to participate.

Let's examine two typical cases: electoral field experiments and deceptive field experiments

Field Experiments: Electoral Information

- There is little imaginable harm or cost to subjects beyond risk of paper cuts (there are contextual exceptions).
- For electoral interventions, the probability that the treatment affects the outcome is very small in most cases.
- The treatment is something subjects encounter in their everyday lives naturally, without risk or harm. And other actors sending mailers have less altruistic motives.
- In addition, our treatment may provide normative benefits: increasing turnout or providing information to voters.

Field Experiments: Electoral Information

- The probability of affecting an election outcome may be high as sometimes research budgets exceed candidate budgets.
- Changing an election affects more than subjects - it potentially affects all citizens in a polity.
- Technically, any change in vote share causes harm. Just changing vote share can be consequential for candidates (financing, deterring future campaigns).
- Persuasion and even turnout are ambiguous normatively. We know that slowing tumor growth rates is good. But how do we defend our studies?

FE's: Deception with Implied Benefit

- More than an "invisible hand", we interact with subjects and deceive them as to our intentions:
  - We send thousands of resumes to potential employers
  - We make client inquiries to businesses
  - We contact politicians with potential problems
- In each case, the subject acts with some expectation of benefit: a new employee, a new business opportunity, more goodwill from constituents, and so on.
- Terrific design when subjects are unlikely to cooperate, or are likely to modify their behavior when they know they are being studied.

FE's: Deception with Implied Benefit

- What's the cost? Just a few minutes of subject time, which they'll never miss!
- Yes, but: suppose you have 10,000 complying subjects, and each spends perhaps 12 minutes on your task. That's (12*10000) total subject minutes, or a year of free labor.
- Would an IRB ever approve deceiving a single subject into committing a year to our study without compensation?
- So why is it acceptable to "atomize" that cost? Is it theft?
- In some cases, it might be a prosecutable form of fraud or lead to a lawsuit.

What are the Critical Issues?

1. Should we analyze individual harm/cost, or aggregate impact?

   The impact of one mailer on a subject, or the impact of 100,000 on a polity?

   The 12 minutes that we trick a subject into spending dealing with our request, or the year spent by all 2,000 subjects?

2. Are the treatment and outcome normatively valuable?

   A reminder to floss, or a reminder that Candidate X got a DUI?

It's really about informed consent

- The most important issue is that of informed consent.
- If subjects are fully informed and consenting, then there is little controversy over subjects' spending 5 minutes on a task, or being more likely to vote, or even changing their voting behavior.
- A lack of informed consent is a necessary condition for other issues to have any traction.
- When is it acceptable to skip informed consent?

Informed Consent

Informed consent is a long-standing central feature of human subjects protections, including the Nuremberg Code, the Declaration of Helsinki, and the Belmont Report, and was a core concept in earlier discussions of ethics.

For example, the first principle of the Nuremberg Code:

1. *The voluntary consent of the human subject is absolutely essential.*

Informed Consent

However, the Common Rule (*not an ethics document*) allows waiver of informed consent when:

- …no more than minimal risk
- …will not adversely affect the rights and welfare of the subjects
- …could not be practicably carried out without the waiver
- … the subjects will be provided with additional pertinent information after participation

Informed Consent – What's The Answer?

- Bioethicists have spent 40 years on this topic, without resolution. Two extremes:

1. Any deception is harm and must be avoided.
2. Informed consent is a "fetish". Citizen committees should decide if we will participate in studies or not.

- I don't see answers in this literature – we are late to the party and those in attendance are making limited progress.

Informed Consent – What's The Answer?

- An alternative: we should ask what our subjects and principals think. This is a form of "empirical ethics".
- If subjects don't like what we are doing to them without informed consent – then we probably shouldn't be doing it to them!
- This implies:
  - Contacting, debriefing, and asking subjects for their judgments on our studies.
  - Survey research on attitudes toward our research (I'm working on this one)
- We don't have data yet, but recent controversies are instructive.

Example: Facebook

- Facebook hid some posts with positive words from .04% of users' feeds, but only on some "loads", for one week.
- Facebook already manipulates feeds to maximize revenue. And they are probably listening to this conversation.
- The impact was tiny: *"the result was that people produced an average of one fewer emotional word, per thousand words, over the following week."*
- Even so, people were furious, FB apologized
- In contrast, an earlier study that reminded some users to vote generated no such controversy.

Example: New York Restaurants

- A researcher wanted to see how businesses respond to complaints.
- He sent a well-written complaint letter that implied food poisoning to Manhattan restaurants
- Restaurants get complaints all the time, what's the big deal?
- Kitchen staff went into crisis mode – examining every step in their supply and service chain.
- When the deception was revealed, they were furious – and sued. Columbia University eventually settled the case.

Some Lessons

Field experiments without informed consent can make people upset, even when treatments are minimally invasive. Why?

1. Human beings do not like deceptive behavior or being manipulated. We expect sincere, and understandable behavior from others, and depend on it for social interaction.
2. Subjects don't understand what we are doing, why we are doing it, or why it might be valuable.
3. The Common Rule may disaggregate harm and impact – but our subjects and principals often do not.

Field Experiments - Recommendations

Seek informed consent whenever possible. If standard consent is not possible, consider alternative forms of consent (Humphreys, 2014):

- Implied Consent
- Proxy (delegated) consent
- Superset / Package Consent
- Deferred (Retrospective) Consent
- Inferred (surrogate) consent

Medical trials run without informed consent provide a model, as do some recent poli sci field experiments (Zimmerman, 2015)

Field Experiments - Recommendations

If proceeding without informed consent:

- *Tread lightly*: Minimize size and impact. Avoid "close" elections. Don't outspend the real candidates. Use balanced samples.
- *Do good*: Make sure your treatment is normatively valuable.
- *Confess*: Contact subjects again and tell them they were in a study. Give them a chance to opt-out.
- *Compensate*: Pay them for their time, with a minimum of $1-$5.

There's an exception to every rule.

Some Parting Thoughts

- There's no belief that any social scientists are particularly evil or that they are seeking to spread human misery. Most of our studies continue to be low risk.
- But there's room for trouble in our world:
  - IRB's aren't ethical committees – they exist to comply with federal rules and keep dollars flowing.
  - We are curious, ambitious, and in many cases, dedicated to solving a particular policy problem through good science. We want answers.
  - We are operating in environments where we have a great deal of potential power and where there is only weak regulation.
  - Ethical research is often NOT in our personal interest, or even in the interest of "good science".

John Charles Cutler

- An experimentalist who had a distinguished career and impact on his field.
- Senior position at a good university
- Led major government research initiatives in disease control and eradication
- “Tireless in the fight against sexually transmitted diseases”
- Dedicated to his research

John Charles Cutler

- He was a lead investigator in a study in Guatemala, where hundreds of uninformed, unconsenting, and coerced subjects were deliberately infected with syphlis.
- He did such a nice job on that study, that he was promoted and sent to work on a merely observational study where African American men in Tuskegee were deceived regarding the provision of treatment for “bad blood”, when in fact they were used to observe the long term effects of syphillis.
- When interviewed about these studies, he firmly defended the science.

John Charles Cutler

- Subjects were unconsenting and uninformed. Some were coerced. (Just like in many of our field experiments)
- Cutler had approval for the studies and was working for the government ("It got past IRB, it must be ok" or "the NGO I work with did the treatment – so it's fresh data!")
- The study in Guatemala was technically illegal, but the Guatemalans enthusiastically welcomed it (for our part, we usually don't even have local approval)
- Subjects wouldn't have had access to treatment anyway (just like when we randomize public goods)
- Cutler ignored downstream consequences on bystanders, including spouses and children (we do that too).

Two critical differences

- The benefits to science of most of our studies are probably significantly lower than any work on disease.
- The amount of human misery inflicted by our studies is probably smaller, most of the time.

Don’t forget

- You can’t outsource ethical judgements to IRB’s – you need to think carefully about what you are doing and what the consequences will be.
- You need to be part of a broad dialogue on ethics, because some problems will require collective effort to solve.
- Ignoring these issues has potentially serious consequences to subjects, enumerators, investigators, and our entire disciplines.
- Be honest with yourself, go do great things, and be careful out there.

NGO's and the IRB End-Run

- IRB's have approved all sorts of questionable research. Even so, from time to time we come up with a design that even an IRB won't approve.
- One solution: get an unregulated agency to do it for you! Then it's "fresh data", and you can publish it!
- Practically, this means that you partner with an NGO or government agency who conducts the randomization under your direction. Or – start your own NGO and have it randomize. Then you can skip the IRB!
- Development NGO's report increasing pressure from donors to conduct randomizations – which is good – but the pressure sometimes means that they struggle to tweak their programs to fit our designs.

NGO's and the IRB End-Run

Many think this is absolutely acceptable. However, there are other positions and recommendations:

- Ask yourself: Are you the cause of the treatment? Did you prompt the agency to conduct the randomization? If so, it's your project and deserves IRB review.
- Full disclosure: the nature of your relationship with the agency, including compensation and discussion of ethics.
- Alert your partner to potential ethical issues and advise them to comply with standard protections.
- Require IRB review for publication of any third party randomization. This would reduce any conflict of interest between scholar and client/NGO.

Example: Montana Turnout Study

- PI's investigated the impact of a simple mailer on turnout. The mailer contained factual information about candidates for judicial offices in Montana.
- Some criticism of this study was procedural and regulatory (election law, IRB, etc).
- The broader criticisms, however, include:
  - Changing or interfering in a real election
  - The size of the project – over 100,000 subjects
  - A right-wing Hoover Institute conspiracy?
  - A left-wing "Kalifurnia" conspiracy?