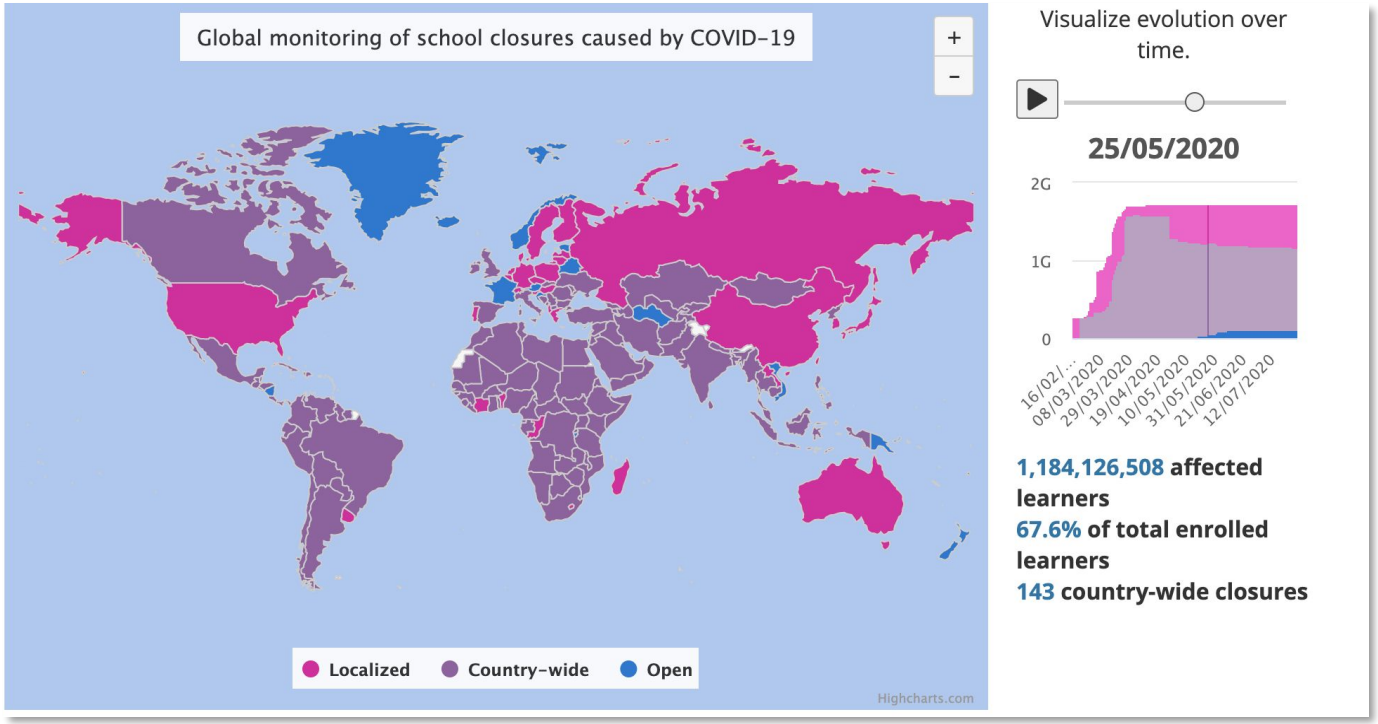
Empowering girls: A randomized trial on mHealth “safe spaces” during COVID-19

Noam Angrist, *Efua Bortsie,* Claire Cullen, Lorato Gaolebe, Amy Jung, Bogadi Mothlobogwa

COVID-19 and the fall-out on girls

There's a "horrifying global surge in domestic violence" directed towards women and girls.

- United Nations Secretary General António Guterres



- Out-of-school girls are at an increased risk of **sexual exploitation** and, therefore, **pregnancy**[1]
- Stresses, like pandemics, lead to surges in **domestic violence.**[2] In Botswana, over 67% of women have experienced abuse, which is over double the global average.[3]

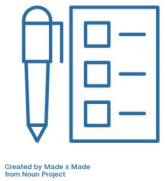
For all the reasons above, out-of-school girls often never return.

Background & Context

- During Covid school closures, Botswana-based NGO, ‘Youth Impact’ converted its normal in-school anti-sugar daddy program to a 1-on-1 phonecall-based safe space program.
- We created a “safe space” platform for adolescents.
- Program: 4 weeks x 10 minute weekly 1-on-1 calls and SMSs between a facilitator and adolescents.

Week 1: Knowledge on HIV

Week 2: Prevention Strategies



Week 3: Links to services

Week 4: Word of Encouragement (Nudge back to school)

Our Motivation

1. The stakes are high: 16 million teen pregnancies and 1.8 million HIV infections occur every year.
2. This is particularly true in Sub-Saharan Africa, which accounts for 70% of new HIV infections (UNFPA 2013; UNAIDS 2018), and where 1 in 4 females give birth before age 18 (UNICEF 2022).
3. Previous shocks (e.g. Ebola) increased unsafe sex, pregnancies and school dropouts for adolescent girls.

But negative outcomes can be mitigated with programs like adolescent safe spaces e.g. delayed marriage, improved sexual health, and reduced domestic violence (Bandiera et al, 2020; Gourlay et al., 2019; Gulesci et al., 2021).

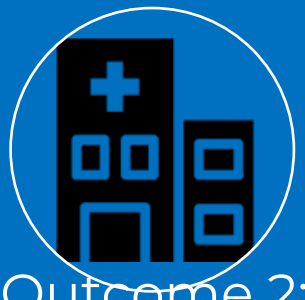
4. COVID forced school closures around the world, so in-person safe spaces were not an option

Research (& Policy) Question

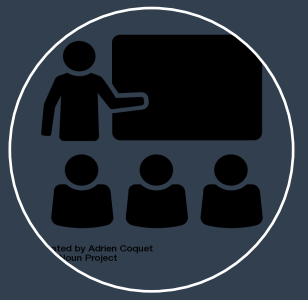
We study whether a phone-based adolescent safe space program can affect longer-term behaviours such as pregnancy and dropouts during a major public health and economic crisis (Covid).

Study Outcomes

Outcome 1. Knowledge about HIV risk and support services



Outcome 2: Adolescent agency and mental health (e.g., Disclosure, agency, SRHR & GBV services)



Outcome 3: Pregnancy and school dropouts .

Research Design

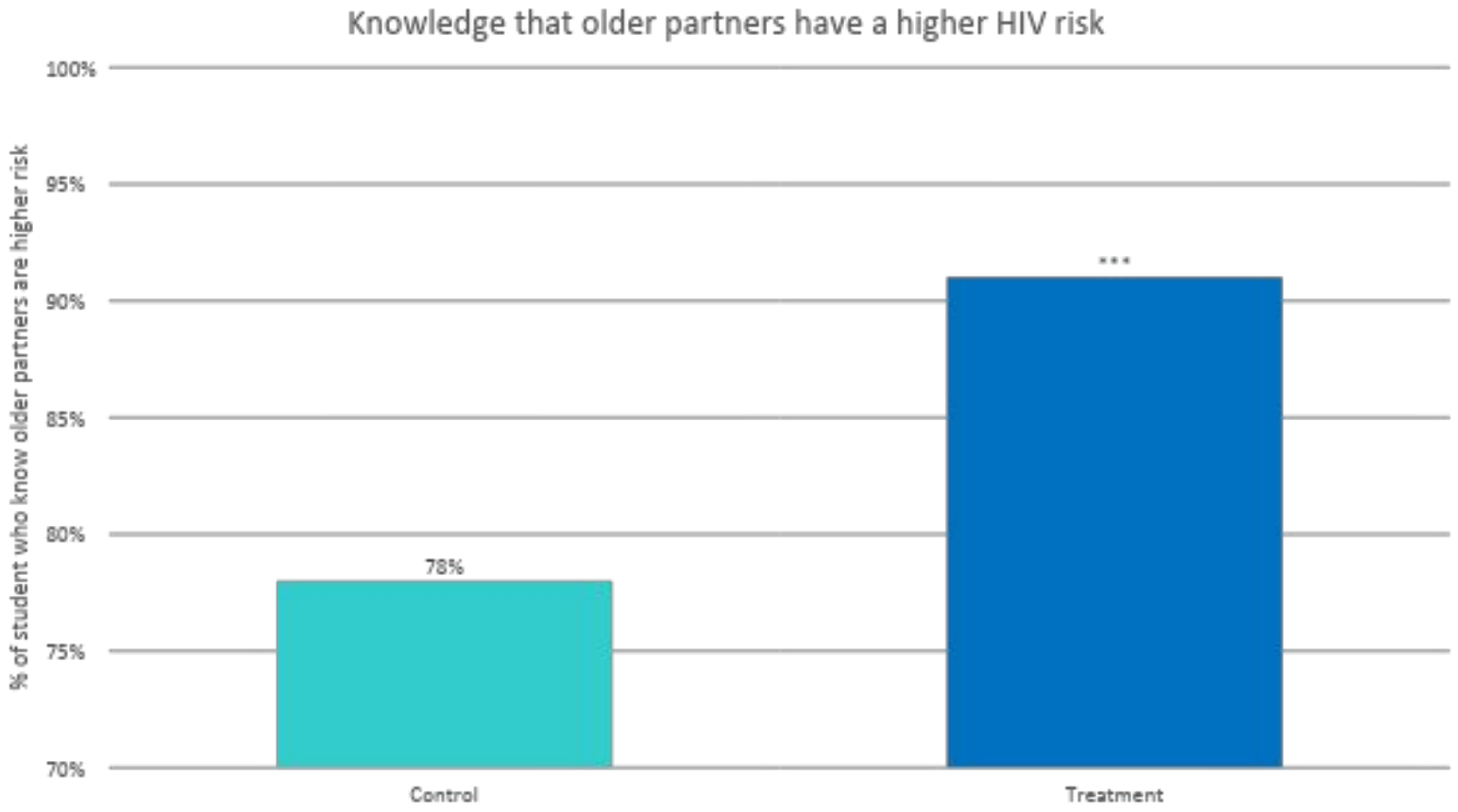
- RCT: 1,200 students were randomly assigned to a treatment or control group.
- Treatment group: Received 4 week intervention
- Control group: Only did baseline and endline surveys
- Conducted across 4 regions in Botswana, with female adolescents in aged 12-16 years.

Research Ethics

Approved at the Minisry of Health and Research Permit from the Ministry of Education

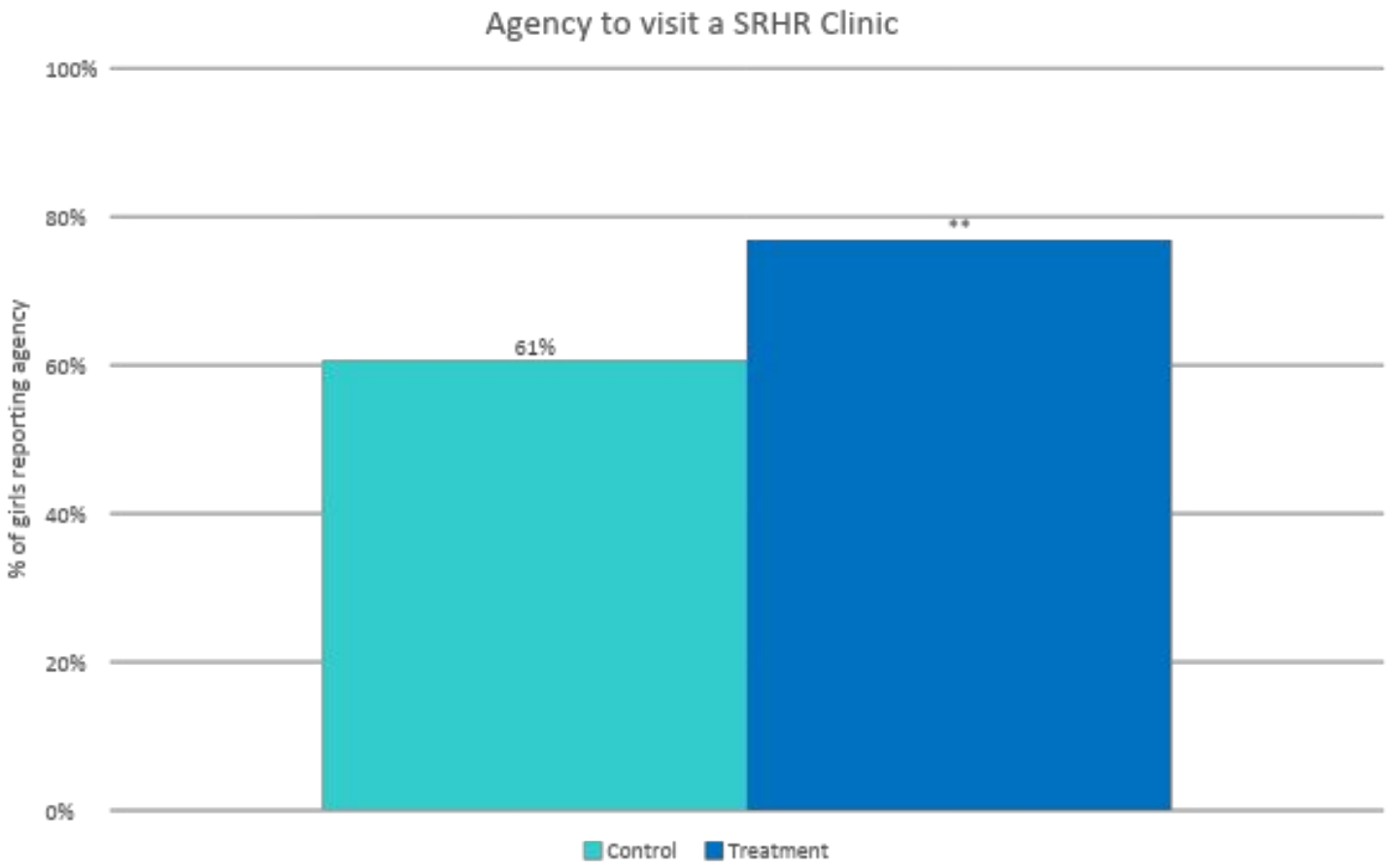
Insight 1: Low-tech increases knowledge about HIV

91% of girls know older partners have high risk of HIV, similar to knowledge gains for in-school program



Insight 2: Girls in intervention significantly more likely to report agency/confidence to visit a reproductive health clinic compared to control group girls

77% of girls feel increased ability to decide when and how to access services

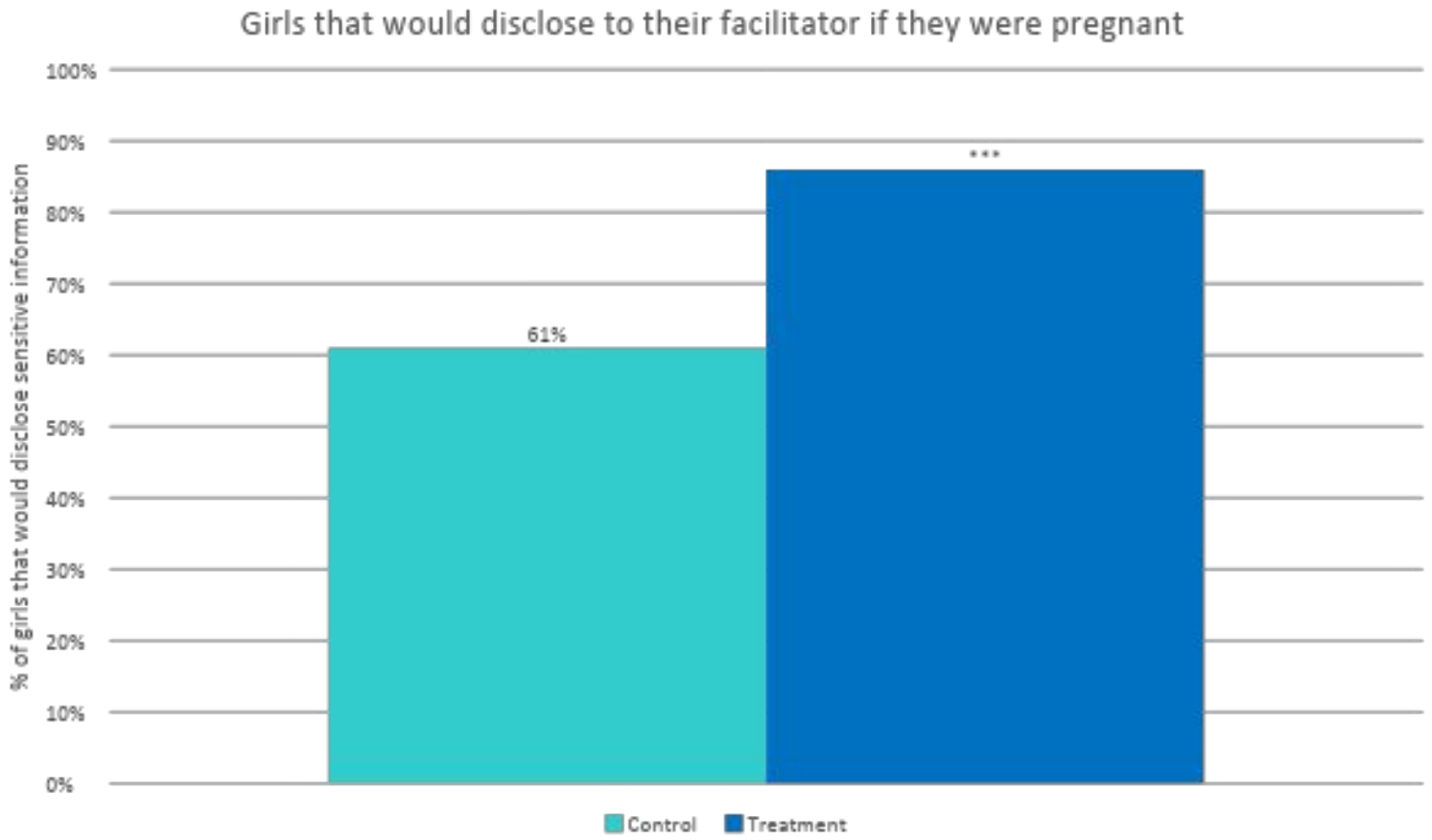


How I wish to join your campaign. If possible, please make it up to me. It's just that I went through a lot of troubles at a younger age, like abuse so I would want to open up more.

-Student

Insight 3: Girls in intervention group were significantly more likely to disclose their pregnancy to a peer than girls in control

Girls are more likely to disclose sensitive information

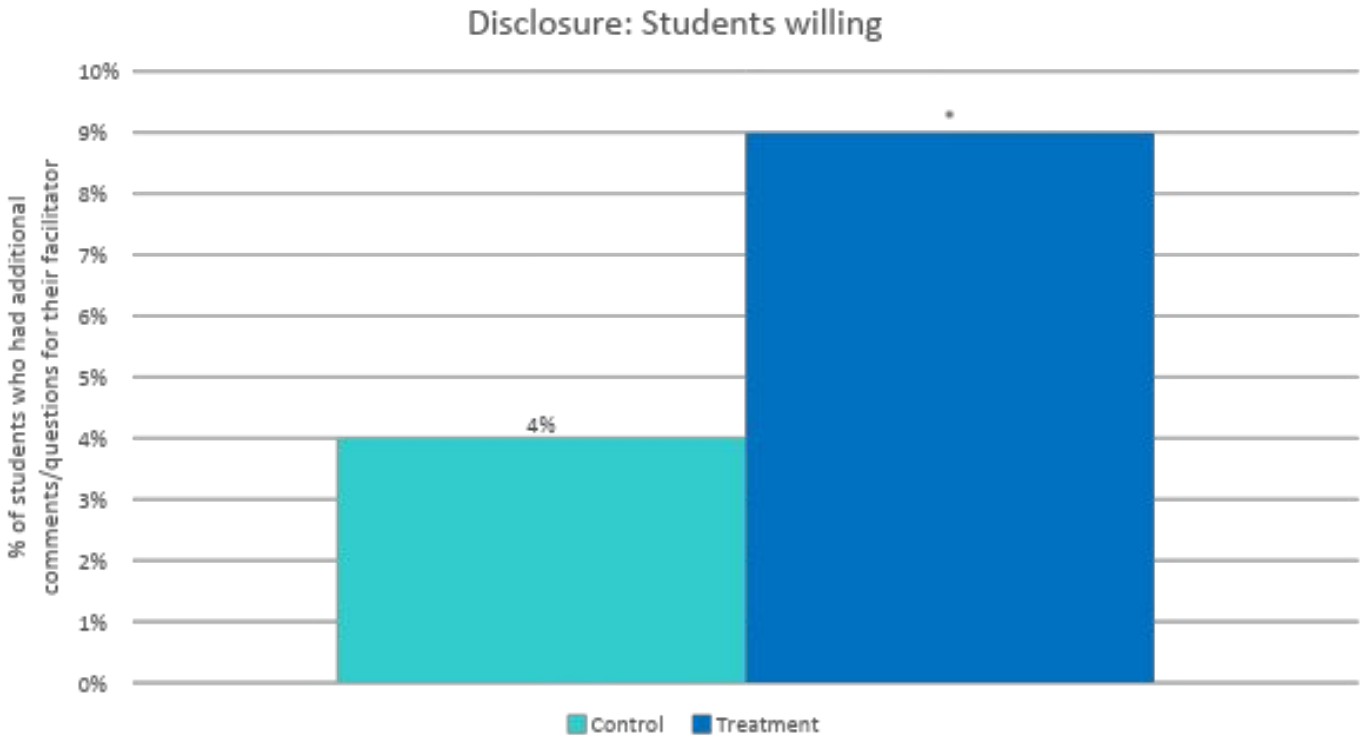


Thanks for I have long been looking for Young 1ove's number, maybe I will heal.

-Student

Insight 4: significantly more like to disclose pregnancy, GBV and sexual orientation

We see adolescents more open to



Breaking the silence on…

…pregnancy

…GBV

…coming out of the closet

6 months post-program: reduced pregnancy and/or dropouts

Table: Student has become pregnant or dropped out of school

	(1)	(2)	(3)	(4)	(5)
Treatment	-0.029**	-0.029**	-0.026*	-0.026*	-0.026*
	(0.014)	(0.014)	(0.014)	(0.014)	(0.013)
	[0.036]	[0.036]	[0.055]	[0.055]	[0.054]
Control Mean	0.029	0.029	0.029	0.029	0.029
Observations	471	471	471	471	471
Controls	Yes	Yes	No	No	No
Previous program fixed effects	Yes	No	Yes	No	No
Region fixed effects	No	No	Yes	Yes	No
Rounds incl.	2	2	2	2	2

Note: Using 6 months post-program administrative data from schools.

In summary, we learned that our low-tech platform *IS* an effective "safe space"

1. It is a **simple** way to impart knowledge to adolescents, showing knowledge gains similar to our in-person Zones programming.
2. It can remotely link students to support services and **increase their agency** to seek out services (Agency □ actual testing)
3. It **enables trust** between the student and facilitator, leading to disclosure of sensitive information
4. Girls in the intervention were **more likely to return to school** post lockdown

What is the future for our low-tech adaptation?

TARGETED SUPPORT (Impact oriented)

During school breaks. Studies show that girls are most at risk of pregnancy during long school breaks. Our low-tech platform could provide routine check-ins and a sense of accountability during these vulnerable times.

Double down. In “at risk” schools that have consistently high pregnancy and HIV incidence rates, our low-tech platform could complement our in-school Zones programming to provide additional support to these students.

PENETRATE NEW AREAS (Scale oriented)

In schools without NSPs, “at risk” schools in new areas, and/or schools in new regions, we can initiate our low-tech platform without in-school Zones programming.

Policy Implications

1. Long-term implications for role of technology and ongoing support for girls ASRH during high-vulnerability school closures (every summer)
2. Scalable and relatively cheap
3. Large government ICT budgets, could be better spent on this type of mobile intervention

Paper will be coming out soon!