

Assessing the impact of Twaweza videos in Mukuru slum, Nairobi

Project proposal

May 28, 2013

1. Summary

We propose to evaluate the impact of motivational material provided on videos in inducing citizen agency and collective action in Mukuru slum in Nairobi, home to about 500,000 people. The broad aim of the intervention will be to give individuals and communities the confidence and power to make a difference in their lives, by emboldening them to demand what is rightfully theirs, to work together to achieve common goals, or to exercise agency in creating alternative opportunities when existing arrangements (e.g., for service delivery) prove ineffective.

2. Context of the project

Although the goals of the project are broad in nature, it will be conducted in parallel with an on-going campaign that is being conducted throughout Mukuru slum by the [Akiba Mashinani Trust \(AMT\)](#), a financial services affiliate of Muungano wa Wanavijiji (MWW), the Slum Dwellers Federation of Kenya. This campaign is focused on sanitation services, the right to which is enshrined in Kenya's new constitution, but which are woefully lacking in Mukuru and other Nairobi slums. AMT has identified the chronic lack of toilets and bathing facilities in informal settlements as compromising the health, safety, and dignity of thousands of people, especially for women and children.

In response, the Trust aims to collect 20,000 signatures that it will use to petition the courts to compel the government to provide basic sanitation services. These signatures will be solicited only from women, as they are seen as the main beneficiaries of improved sanitation services. Women are also perceived to face potentially larger social costs of speaking up, so their signatures could carry even more weight in the eyes of the courts. Only women aged 18 or older can sign the petition.

Our project is *not* an evaluation of AMT's signature campaign. Instead, we will use the petition as a measuring stick against which to assess the impact of the intervention in one particular context. In particular, we will see if women exposed to our intervention are more likely to sign the petition (although this will not be the only outcome variable).

As described below, our intervention will vary geographically across Mukuru slum, with some venues showing "treatment" materials and others showing "placebo" videos. However, the locations all fall within the area in which AMT will collect signatures, and we will make every effort to immunize AMT field personnel against direct knowledge of the intervention, and in particular of the treatment status of individual venues and potential signatories. This way, we hope to guarantee that recruitment efforts by AMT for the signature campaign will not differ systematically between treatment and control areas.

3. The intervention

(i) Target population and materials

We will deliver a suite of videos, screened twice a week over six weeks to communities across the Mukuru slum. The videos will be targeted at women over the age of 18, and the events will be marketed as “women’s only video afternoons/evenings”. While exposing men to the materials could also have important effects, there are two reasons for restricting the shows to women. First, to the extent that participation in the AMT signature campaign is used as an outcome variable, exposing men to the treatment provides us with little additional information.¹ And second, we anticipate that it will be easier to induce women to attend video screenings (in potentially dark and claustrophobic environments) if they can be sure that no men will be present. All attendees will be told that the videos are being screened to build a sense of community spirit, and as a contribution by the sponsor to the community.

We have already begun reviewing a range of video material from Twaweza’s partners, including *Makutano Junction*, *Buni TV*, *ni sisi*, and the comic books *Shujaaz* FM. Each viewing generates a summary of the main theme and key messages. Videos are viewed by numerous viewers so that we can account for viewer effects. We have also collected the synopses of all *Makutano Junction* shows. Our plan is to separate *Makutano Junction* videos with any citizen agency messages and draw the placebo from the other videos. From the videos a series of 45-60 minute screenings will be produced, which will combine episodes of different shows in one viewing, for example with a *Makutano Junction* episode plus a *ni sisi* video, etc. For the placebo screenings (see below), in addition to *Makutano Junction* videos without citizen agency messages, we are also discussing with Citizen media to obtain other material that we feel sure would attract (and retain) a similar audience.

On the 'audience similarity', we will collect lots of information about the women we recruit, and we will record the identity of the women who attend the screenings. On this basis, we can see if those who attend videos in one group are statistically similar to those who attend in the other (on the basis of the characteristics we observe).

(ii) Experimental design

The basic design will be a simple 2x2 RCT, in which a treatment group of women will be exposed to videos with Twaweza-inspired motivational content, and a control group will be exposed to a series of placebo videos. These two main treatment and placebo groups will be divided into two sub-groups each, one of which will receive explicit information on what actions to take to improve sanitation in their communities. Such instructions will be limited to a simple announcement about the AMT petition, how it will be used, and what to expect when asked to sign it (e.g., you will be required to provide your national ID number). These announcements will be issued as a short 20-30 second clip at some point during or at the end of the general screening.²

¹ Although we can’t hope to observe differences in men’s signing behavior (because they don’t sign the petition), exposing men to the treatment could increase the likelihood that a woman will sign it, if men are somehow pivotal in this decision. We have decided that our ability to attract more women to the screenings if men are not present outweighs any possible increase in intensity of the treatment that might be experienced if men are present.

² In a previous description of this intervention we did not include the “information” cross treatment.

The proposed design is illustrated in the following table.

Table 1: Design

| | | |
|----------------|------------------|----------------------------|
| | Placebo videos | Treatment videos |
| No information | Pure control | Motivation only |
| Information | Information only | Motivation and information |

Treatment videos will consist of material from Twaweza’s partners that portray motivational stories about people taking action to improve their lives. The material will be packaged into a series of 30-60 minute screenings, depending on the specific material used. These may combine episodes of different shows in one viewing, for example including a *Makutano Junction* episode plus a *ni sisi* video, etc. All video screenings will be free, as will be any printed material we make available.

(iii) Venues

We have undertaken an extensive mapping exercise in Mukuru, in which we have identified locations at which videos could be screened, including video halls, schools, churches, and community halls and other public venues.

Table 2: Mapped Venues in Mukuru

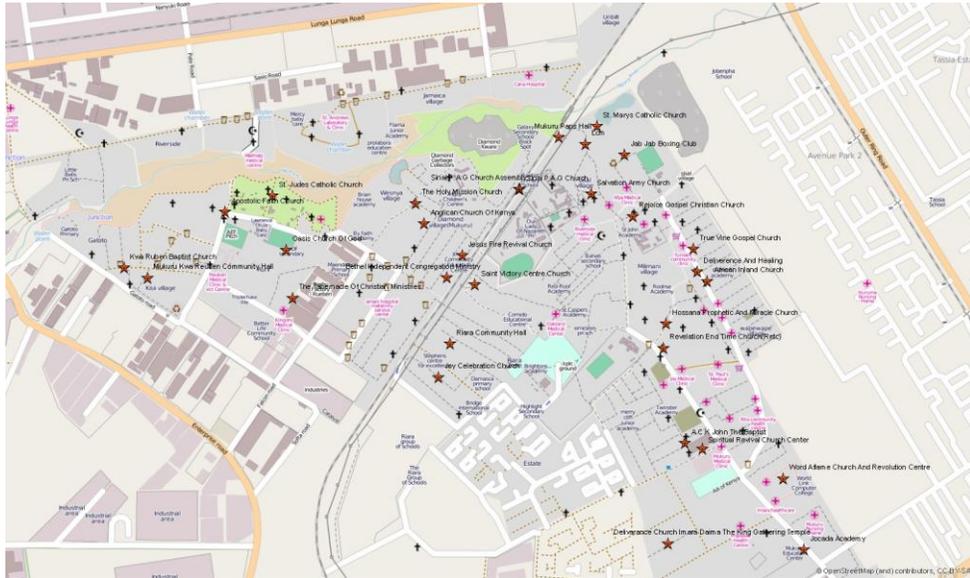
| Type of venue | Number |
|------------------|--------|
| Video halls | 84 |
| Schools | 204 |
| Churches/Mosques | 314 |
| Community halls | 19 |
| Total | 621 |

Preliminary qualitative work (Focus Group Discussions with women in the Mukuru area) has revealed that women are very unlikely to attend video screenings in video halls. In addition, they report that weekend showings will not be convenient, nor would any timing after 6pm. This means schools are also not suitable venues. Women also reported they would be willing to attend two viewings per week. Therefore, we will concentrate our efforts on showing the videos in churches and community halls, on Mondays, Tuesdays, Wednesdays and Thursdays, morning and afternoon. Each venue (within strata of churches and community halls) will be randomly assigned to one of the four treatment groups in Table 1.

One implication of the unsuitability of video halls is that we will need to purchase more equipment than originally anticipated. (The equipment will however be employed in future work in rural areas.)

Figure 1 maps the 30 venues at which we will show the video materials.

Figure 1: Revised venues (starred)



Based on our survey of facilities, we are proposing to work in about 25-30 venues. The videos will be shown four days a week, in the morning and afternoon, at each venue, planning to reach 100 groups. Using a clustered design with 50 groups of 50 viewers, we have sufficient power to measure a 5 percentage point change in the proportion of women who sign the petition (from a baseline of 15%). We need this large sample both to account for potential spill overs and for the precision of measuring plausible effect sizes.

(iv) Recruitment

In a prescribed area around each venue, we will conduct an individual-level recruitment drive. We will visit 50 randomly selected households and will issue invitations to all age-eligible women to attend the video events at the corresponding venue. All of the eligible women in each household who possess a national ID will receive a plastic token (like a credit card) with a unique number, and which will include the name and location of the venue to which they have been invited. Our enumerators will record the names and national IDs of all eligible women in the household, and the token numbers they have received. During these visits, we will ALSO conduct a short baseline survey to solicit information on perceived problems and potential individual and/or community level responses, and to document exposure to similar campaigns and initiatives.

Questions have been raised about the feasibility and implications of requiring women to possess and present a national ID in order to participate in the study. In an unrelated project nearby Mukuru, of the 2300 women who we recruited, 60% had a national ID. In that project, women were not unwilling to share the information with our enumerators. Those with IDs were,

predictably, statistically different to those without. However, although this limits what we can say about the impact of the videos on *all* women, it does not jeopardize our ability to measure their impact on women with IDs, given the randomization. Finally, of those who did not have national IDs, fully 85% owned a mobile phone. The phone number might be used as a form of identification for many of those without an ID.

The plastic tokens distributed to eligible women will act both as entry passes for the events at the specified venue, and as raffle tickets. Upon attendance at a screening, our enumerators, who will be stationed at each venue, will record the attendee's token number, which will feed into a series of raffles. First, all women who attend a given event and produce their token will receive a small given (e.g., a toiletry sample such as skin lotion); second, of those who attend, a small number will be randomly selected at the end of each screening to receive prizes (such as mobile phone airtime); and third, of those who attend (say) at least 10 out of the 12 screenings, one will be chosen at random at the end of last screening at each venue to win a larger "grand" prize.

It will be explained that, through the link with national IDs, only the woman to whom a given token is assigned will be able to win a raffle prize if that token is selected. Participants will then have an incentive to retain the tokens, and others will have no incentive to seek them out.

Because the tokens can be used only at one venue, the women will not be told explicitly whether they are being exposed to the treatment or placebo videos. They may of course discuss what they have seen with women who are exposed to different material, but we anticipate that the incentives we provide to attend will minimize attrition, and that any fall-off in attendance will be similar in all four treatment groups.

Finally, we will consider allowing women who do not hold tokens to attend the video screenings, if space is available. We might record their names and national ID numbers (to later match with AMT petition signatories), but they will not be eligible for the raffle prizes (although they might be eligible for the small gifts). This strategy will be adopted to ensure that the video screenings are not seen as excluding any women who would like to come but are not recruited individually.

Given that both the treatment and control venues are part of the Mukuru, there is concern about spill-over between the two groups. Research from a slum in Kampala not too different from Mukuru suggests that social networks may in fact not be very dense in urban areas: only 5% of respondents recruited for a set of experimental games reported knowing other participants. While connectedness within urban "blocks" will be high, we anticipate much lower leakage of the treatment across blocks. This said, we will include questions in the surveys that will help us assess the breadth of a woman's social network within and across blocks. At endline, we will also obtain information on who she has talked to about the videos and where they live.

(v) Branding

We do not want to prime households about the research, or to explain that we are looking to measure the impact of the videos on their willingness to solve either individual or collective action problems. However, with no explanation, they might be curious, or even suspicious, about why they are being invited to a series of video screenings. Due to these concerns, in order to validate the screenings have sought sponsorship from commercial entities in Kenya

with a high-profile brand name. At the time of this writing, Royal Media Services will provide sponsorship for the project, in the form of visual logos and promotional activities. We are still negotiating with Nivea, which might also provide useful support (in the form of co-branding and small give-aways). Safaricom, who we also approached, has declined to offer support in this instance.

We anticipate that individuals will then see the screenings simply as part of the company's overall marketing activities. Prizes and give-aways provided at the screenings would likely be drawn from the sponsoring entity's product line. Some public marketing (posters, etc.) will be used to lend credibility to the individual invitations.

(vi) Timing of the intervention

AMT was originally intending to complete its petition drive by the end of May, 2013, but has agreed to extend collection of signatures until the end of September. Although the petition is on-going, we will work with AMT to ensure there is a concerted effort to collect signatures near the end of the six-week video intervention, and in the weeks immediately following it.

With this in mind, we anticipate screening the videos from early-July through mid-August. This will allow AMT to conduct at least a full month of signature collection after the screenings (and will also mean that we finish screening before the new English Premier League competition starts, during which time gaining access to video halls could be problematic.) In addition, we will continue screening the shows past the end of the petition campaign in order to assess the impacts on other outcome measures associated with continued exposure.

(vii) Data collection

We will conduct focus group sessions and administer baseline and endline surveys. We will also collect attendance information, and we will use administrative data from AMT.

FOCUS GROUP SESSIONS

We will conduct a series of focus group sessions with women in a part of Mukuru that is similar to the proposed project site, but sufficiently removed that we will not contaminate our sample. During these events we will show sample videos and solicit feedback on the content, and the suitability of the venues. We will also ask respondents to identify collection action challenges and other problems that might be addressed through more active citizen engagement.

BASELINE SURVEY

As described above, a baseline survey will be administered during the individual-level recruitment. We anticipate conducting at least 5,000 such interviews at households in the vicinity of about 100 chosen venues. DDD staff will conduct these interviews in person, and will collect responses using a mobile phone application. We will ask women for their phone numbers so that we can push out SMS reminders of the video shows over the course of the intervention.

ATTENDANCE SURVEYS

During the series of videos, we will collect basic identifying information on attendees at all screenings, both those women who have been individually recruited and others who walk in

uninvited. Again, this information will be entered on mobile handsets, and the raffle winners will be generated on a remote server.

ADMINISTRATIVE DATA

AMT currently collects the name, national ID number, and signature of willing respondents, and have agreed to share this data with us going forward. We will also work with them to collect more data as part of the petition process, including the date of signature, the individual's age, gender and home location (e.g., sub-zone), and some other basic information. These data will be used to match AMT records with our survey data.

ENDLINE SURVEYS

We will conduct a first endline survey of the households that were visited during the recruitment phase of the project. This survey will take place within 2 months of the completion of the video intervention. We will subsequently return to the same households about 3 to 4 months later to conduct a second follow-up survey, in which we assess the extent of behavioral changes not directly associated with the signature campaign, including attendance at community meetings and events, participation in and establishment of savings- and other groups, and engagement in collective action to solve problems identified in the focus groups.

(viii) Logistics

All field activities will be administered by Digital Divide Data. They will undertake the following tasks:

- Mapping of venues
- Interviews of venues to establish suitability
- Review of video materials for inclusion
- Focus groups
- Survey design, testing and implementation
- Intervention monitoring

3. Partner organizations

We will partner with Digital Divide Data to implement the intervention and to administer the surveys. The Akiba Mashinani Trust will continue to implement its operations independently of our work, but will liaise closely with us regarding the data they collect, and which they will share with us. AMT has offered to make their staff members available to assist DDD in identifying key stakeholders in Mukuru who can provide access to venues and community buy-in.

4. Gantt chart

| | | | | | | | | | | | |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Venue mapping | ■ | | | | | | | | | | |
| Venue interviewing and contracting | ■ | | | | | | | | | | |
| Video reviewing | ■ | ■ | | | | | | | | | |
| Video selection and production | | ■ | | | | | | | | | |
| Baseline survey + recruitment | | ■ | | | | | | | | | |
| Video intervention | | | ■ | ■ | ■ | ■ | ■ | | | | |
| AMT signature campaign | ■ | ■ | ■ | ■ | ■ | | | | | | |
| First endline individual survey | | | | | | ■ | | | | | |
| Second endline survey | | | | | | | ■ | | | | |
| Analysis | | | | | | | ■ | ■ | ■ | ■ | ■ |
| | May-13 | Jun-13 | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 |

5. Budget

The first survey is costed at \$10 per interview, and the subsequent surveys at \$15 per survey, under the rationale that part of the cost of follow-up surveys is incurred in locating individuals who have already taken part in earlier rounds. Also, since we plan to use fewer venues, but more intensively, we estimate lower hiring, supervision, and security costs.

We have included in the budget below one month of summer salary (including Georgetown's fringe) for each of the three PIs, to cover both work on the project in the field, preparation of the literature review, and on-going project oversight. We have reduced the number of PI trips in the budget in light of the fact that two of us will be in East Africa over the course of the summer with support from other grants.

DDD will assume comprehensive management and implementation responsibilities, will undertake thorough financial oversight of project expenditures, and will engage in regular reporting. They will continue to work closely with the PIs to ensure the project is implemented according to the experimental design we have proposed.

Finally, our core budget includes funding of all pre-implementation costs, plus an initial 6-week screening. In addition, we have included a supplementary budget column for an additional 6-week period, but the decision of whether to proceed will not be taken until 4 or 5 weeks into the implementation of the intervention.

Table 3: Revised budget**Budget for the "Mukuru study" -- Task order 2 -- of the MOU No.121278 between Twaweza and Georgetown University**

| Item | Core budget | Supplement* |
|--|-------------|-------------|
| Surveys (1 @ \$10 and 2 @ \$15 per respondent x 5,000) | \$200,000 | |
| Drafting and testing questionnaire, training enumerators | \$2,500 | |
| Mapping and contracting | \$7,500 | |
| Focus group screenings and discussions (5 @ \$250) | \$1,250 | |
| Venue hire (100 screenings x 12 episodes @ \$10) | \$12,000 | \$12,000 |
| Screening supervision (100 screenings x 12 episodes @ \$5) | \$6,000 | \$6,000 |
| Security (100 screenings x 12 episodes @ \$5) | \$6,000 | \$6,000 |
| Video preparation | \$1,500 | |
| Laminated tokens | \$500 | |
| Research manager (6 months @ \$3,000pm) | \$18,000 | |
| Prizes (100 x 12 @ \$5 each time+100 x \$20 grand prizes) | \$8,000 | |
| DDD management | \$39,500 | \$3,600 |
| PI summer salary (40 days at 800 USD per day) | \$32,000 | |
| PI travel (2 trips @ \$4,000) | \$8,000 | |
| Equipment (30 mobile screens and projectors @ \$750) | \$22,500 | |
| Sub-Total 1 | \$365,250 | \$27,600 |
| Georgetown Overhead | \$18,263 | \$1,250 |
| Sub-Total 2 | \$383,513 | \$28,850 |
| Sub-Total 3 (with the supplement) | \$412,363 | |
| Down-payment (by Twaweza, Dec. 2012) | \$100,000 | |
| Grand total | \$312,363 | |

* Expenditures required in the event that a second round of screenings takes place