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Evaluating the Effects of Entrepreneurship Edutainment in Egypt

Randomized Controlled Trial Baseline Report
September 2015

TAQEEM INITIATIVE





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Evaluating the Effects of Entrepreneurship Edutainment in Egypt

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Preface

In June 2012, the International Labour Conference of the ILO resolved to take urgent action to tackle the unprecedented youth employment crisis through a multipronged approach geared towards pro-employment growth and decent job creation. The resolution “The youth employment crisis: A call for action” contains a set of conclusions that constitute a blueprint for shaping national strategies for youth employment.¹ It calls for increased coherence of policies and action on youth employment across the multilateral system. In parallel, the United Nations Secretary-General highlighted youth as one of the five generational imperatives to be addressed through the mobilization of all the human, financial and political resources available to the United Nations. As part of this agenda, the UN has developed a System-wide Action Plan on Youth, with youth employment as one of the main priorities, to strengthen youth programmes across the UN system.

The ILO has responded to this call by investing more into understanding “what works” in youth employment, including through a focus on the generation of evidence in the “Area of Critical Importance on Jobs and Skills for Youth” (ACI II) and through its technical cooperation portfolio. Since 2011, the ILO has aimed to increase the effectiveness of youth employment interventions in the Middle East and North Africa through the Taqueem (meaning “evaluation” in Arabic) Initiative. The Taqueem Initiative is a technical cooperation programme of the International Labour Organization and regional partners including Silatech, the International Fund for Agricultural Development and the International Initiative for Impact Evaluation. Taqueem applies an iterative cycle of capacity development, impact research and policy influence to improve evidence on “what works” in youth employment and to support youth employment policy makers take evidence-based decisions for better resource allocation and programme design.

The “Impact research” series diffuses research reports from Taqueem supported impact evaluations. Reports include baseline, endline and qualitative reports which describe the research designs, methodologies, interventions under investigation and policy and programmatic findings and recommendations. Research in this series has been selected through ILO’s Fund for Evaluation in Employment, an annual call for proposals, which provides seed funding, and technical assistance to rigorous impact evaluations.

Authored by Ghada Barsoum, Bruno Crépon, Drew Gardiner, Bastien Michel, Marwa Moaz, and William Parienté, this paper *Evaluating the Effects of Entrepreneurship Edutainment in Egypt* presents the baseline analysis of the impact evaluation of a youth entrepreneurship reality TV show called El Mashrou3. The research will provide important insights into the effects of so called “edutainment” interventions on enterprise development

¹ The full text of the 2012 resolution “The youth employment crisis: A call for action” can be found on the ILO website at: http://www.ilo.org/ilc/ILCSessions/101stSession/textsadopted/WCMS_185950/lang--en/index.htm.

outcomes for youth. The authors have designed a randomised controlled trial (RCT) to estimate the intervention's impacts. While this baseline report only recounts descriptive statistics on the study sample and balance tests between the treatment and control group, an endline survey report is expected in early 2016 will provide final impact estimates of the El Mashrou3 show.

We would like to thank Silatech and the International Initiative for Impact Evaluation for the financial support for this evaluation as well as to the Abdul Latif Jameel Poverty Action Lab for research and grant management support. Finally, Bastien Michel deserves a special vote of thanks for overall research management and the first drafts of this report.

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Section 1: Introduction

In Egypt, inequalities of opportunity in the labour market are critically high and are believed to be one of the causes of unrest in the country. According to a recent report on the labour market transitions of young women and men in Egypt (ILO, 2014)¹, 15.7 per cent of the youth population between 15-29 were unemployed in 2013, while 29.0 per cent were not in education, employment or training. This burden falls particularly hard on young women and the more highly educated.

Given the lack of wage employment suitable for young people in Egypt, some evidence suggests that fostering youth entrepreneurship may be a helpful means of tackling this issue. In particular, while 53.6 per cent of young Egyptians express a preference for running their own business over having a salaried job, only 1.2 per cent are actually self-employed. This situation could be attributed to credit constraints and the lack of an enabling environment for entrepreneurship (Population Council, 2011). The above-mentioned report by the ILO corroborates this, and concludes that Egypt has too few young entrepreneurs. However, there is still little robust evidence showing that youth entrepreneurship programmes deliver positive employment outcomes; nor is there evidence on the most effective means of delivering youth entrepreneurship interventions.

As part of an effort to increase the evidence related to youth entrepreneurship in the Arab world, the ILO has joined with regional partners to create the Taaqem initiative. Taaqem provides support for the rigorous evaluation of youth interventions and disseminates findings and recommendations on “what works” in youth employment. As part of the Taaqem initiative, a global research team was assembled to evaluate the impact of an innovative youth entrepreneurship reality TV show in Egypt called El Mashrou3, produced and directed by the international NGO Bamyán Media. Bamyán defines the primary objective of the show as: to use the power of mass media to inspire a new generation of youth entrepreneurs. This is achieved through broadcasting messages about entrepreneurship skills and good business practices. In addition to producing the show, Bamyán Media carried out support activities to create a bridge between El Mashrou3 and the real world. A website was created so that viewers could access online courses, educational videos and mentoring services. Public viewing parties and networking events were also organized.

Given the massive growth in so-called “edutainment” – defined as computer games, television programmes or other material that is intended to be both educational and enjoyable – researchers set out to understand the level of impact the El Mashrou3 TV show had on the economic opportunities of Egyptian youth. An impact evaluation with a randomized controlled trial design is being carried out to estimate the influence of the

¹ Available online at www.ilo.org/employment/areas/youth-employment/work-for-youth/publications/national-reports/WCMS_247596/lang--en/index.htm

show. Treatment and control groups were established randomly by sending text message invitations to eligible young people. The design of this evaluation has allowed researchers to compare two similar groups and to observe the counterfactual: what would be the situation in the absence of the El Mashrou3 TV show?

This report has several purposes. The first is to set out clearly for the study team and for interested parties all the details involved in selecting the study population, including details of the random selection process used. The second is to summarize information from the baseline survey to give a picture of the types of young people involved in the study. Finally, the report provides background information about the TV show itself, the contestants and the content of the episodes. It should be noted that only minimal data are presented from the baseline survey, as data continue to be collected, improved and analysed.

Section 2: Study design

As there were strong reasons to expect selection bias with respect to the type of young people who would watch the show and choose to participate in the support activities, we used a randomized controlled trial to generate the correct counterfactual for the study's treatment group. Given that the show was broadcast nationwide on a channel available to all Egyptians, it was impossible to restrict the audience (or treatment group) that would participate in the impact evaluation's survey. The same applied to the show's website. We therefore decided on a randomized controlled trial using an "encouragement design": a random subset of our sample was encouraged to watch the show through text messages reminding them of the channel and the time at which the show would air. If take-up rates (watching the show) were higher in the encouraged (i.e. treatment) group than the non-encouraged (i.e. control) group, these two groups could be compared to assess the impact of watching the TV show. Indeed, since the text messages were sent at random, any variations in outcomes could be attributed to the difference between these take-up rates.

The impact of this intervention will be assessed on a range of outcome variables, including business practices, employment status, skills and attitudes towards entrepreneurship.

Section 3: Baseline survey

3.1 Sampling guidelines

The baseline survey took place between December 30th and January 6th, 2014.. In order to ensure that a nationally representative sample of Egyptian youth participated in the evaluation, phone numbers were selected at random using a “random digit dialling method”. In total, 9,327 respondents were selected in two batches: 5,974 were selected as a first batch through random dialling and 3,353 were selected by asking every batch 1 respondent for the contact details of three of their friends. By including individuals in the same peer groups, we were able to measure the importance of personal networks. Moreover, this focus on a homogeneous sample of individuals who are specifically interested in starting their own business should lead to larger effect sizes and ensure greater statistical power.

In order to ensure a more homogenous sample group, only individuals (both batch 1 and batch 2 respondents) who met the following criteria were included in the sample:²

- own a mobile phone
- aged between 18 and 35
- have expressed an interest in starting their own business in the next 12 months
- watch TV, at least occasionally

When these eligibility filters were applied, the sample was reduced from 16,223 to 5,974 individuals.

In order to ensure that the sample was representative, guidelines were put in place to increase the response rate to the phone calls. For example, each phone number was to be attempted five times, at various times of day and on different days of the week.

3.2 Data collection

3.2.1 Sampling

In total, 67,996 calls were made to 39,830 randomly generated mobile numbers. The following two tables show how these calls and numbers were categorized following completion of the data collection exercise.

² Prior survey data suggested that these inclusion criteria should not be too restrictive, as 53.6 per cent of young Egyptians have expressed a preference for running their own business over having a salaried job (Population Council, 2009).

Table 1: How the 67,996 calls were categorized

	Questionnaire completed	Did not meet inclusion criteria	Refused to participate	Call not made
Respondent was reached	6,000 (8.82%)	10,492 (15.43%)	6,701 (9.86%)	0
Wrong number	0	0	0	3,345 (4.92%)
Number does not exist	0	0	0	26,314 (38.70%)
No answer	0	0	0	11,432 (16.81%)
Number busy	0	0	0	3,712 (5.46%)

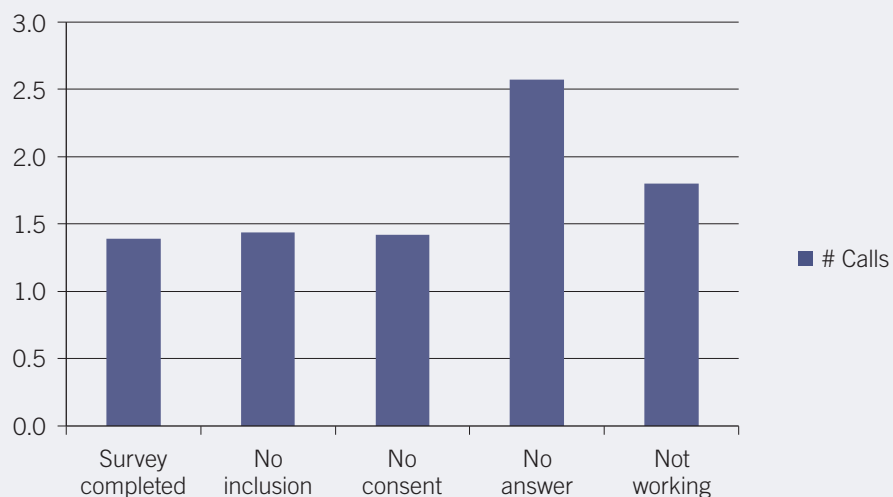
Table 2: How the 39,830 mobile numbers were categorized

	Questionnaire completed	Did not meet inclusion criteria	Refused to participate	Call not made
Respondent was reached	5,973 (15.00%)	10,250 (25.73%)	6,288 (15.79%)	0
No answer/ number busy	0	0	0	6,238 (15.66%)
Number not working	0	0	0	11,081 (27.82%)

Number of calls in practice

As part of the data collection process, each working mobile number was rung up to five times, whether the result was that the questionnaire was completed, the person called refused to participate or the phone's owner did not match our inclusion criteria. These results are shown in Figure 1 below.

Figure 1. Number of attempts per final status



3.2.2 Sample characteristics and representativeness

The study sample was made up of a total of 9,327 individuals: 5,974 batch 1 respondents (called at random) and 3,353 batch 2 respondents (recommended by their friends).

The following table sets out the characteristics of the sample and compares them with the Egyptian population as a whole. This is done using the 2008 Demographic and Health Survey (DHS). The table also uses more detailed statistics from the DHS survey, comparing our sample with other young people in terms of both age alone and then age and mobile phone ownership.

Prior to drawing any definitive conclusions on the representativeness of the study sample, the following two limitations should be borne in mind. First, the small number of missing values may indicate data imputation (replacing missing data with substituted values). Checks will be carried out as part of the endline survey to assess the accuracy of the baseline data and the extent to which it can be used for balance check purposes and the assessment of representativeness. Second, assuming that the extent of this problem is limited, one must also be cautious in comparing data from 2008. This is especially the case for the asset ownership data, and possibly also the data on general status and education. Cross-check comparisons will be made with the 2014 DHS data.

The sample has the following characteristics:

- It is mostly made up of young men: they represent 78.74 per cent of the study sample, whereas only 50.35 per cent of Egyptian 18 to 35-year-olds are male. It seems that women are either more difficult to reach by phone or are less likely to match the inclusion criteria. Both factors probably play a part: according to the Population Council (2011), only 47.7 per cent of females would rather be self-employed than have a salaried job, compared with 59.9 per cent of males.
- The average age of the sample population is 26.5 years. It is worth noting again that we deliberately decided to focus on young people aged between 18 and 35, given their current difficulties in the labour market: in 2010, while the overall unemployment rate in Egypt was 9 per cent, it had reached 16.6 per cent and 55.8 per cent respectively for men and women aged between 20 and 24, according to the ILO.
- Individuals from City governorates are over-represented in the sample in relation to their share of the Egyptian population. In total, 26.62 per cent of the individuals in our sample come from the four city governorates (Cairo, Alexandria, Port Said and Suez), whereas only 17.67 per cent of the total population live there this has led to an under-representation of individuals from Lower and Upper Egypt.
- The same effect is observed for highly educated individuals: the average schooling level is higher in the sample than in the overall Egyptian population, with only 4.69 per cent of respondents having no education at all, compared with 32.50 per cent in the overall population. By contrast, 30.79 per cent of respondents graduated from secondary school, compared with only 11.17 per cent in the population as a whole.
- The sample is made up of individuals who are slightly wealthier than the average Egyptian, as illustrated by the asset ownership data. However, some of the differences observed may be due to the six-year gap between the collection of the 2008 DHS data

Table 3: Characteristics of sample group

	Sample			DHS 2008	DHS 2008 18–35	DHS 2008 18–35 with mobile phone
Variables	#	Mean	SD	Mean	Mean	Mean
Male	9,327	78.74%	0.41	50.35%	49.94%	49.75%
Age	9,327	26.62	4.85	26.02	25.40	25.39
Watches TV	9,327	100.00%	0.00	–	–	–
Interest in starting a business	9,327	100.00%	0.00	–	–	–
Shared an email address	9,327	15.57%	0.36	–	–	–
Location						
City gov.	5,974	26.62%	0.44	18.90%	19.11%	26.73%
Lower Egypt gov.	5,974	38.57%	0.49	32.85%	43.35%	33.38%
Upper Egypt gov.	5,974	32.98%	0.47	36.87%	36.12%	37.23%
Frontiers gov.	5,974	1.84%	0.13	1.37%	1.41%	1.66%
Education level						
No education	5,974	4.69%	0.21	32.50%	13.73%	7.33%
Primary education	5,974	17.56%	0.33	22.07%	10.09%	8.04%
Secondary education	5,974	46.99%	0.26	34.26%	53.10%	51.35%
Higher education	5,974	30.79%	0.43	11.17%	23.09%	33.28%
Type of dwelling						
Apartment	5,974	36.31%	0.48	46.23%	45.01%	32.94%
Free-standing house	5,974	62.49%	0.48	52.47%	53.71%	66.15%
Other	5,974	1.30%	0.11	1.30%	1.28%	0.91%
Ownership of assets						
Television	5,974	98.81%	0.28	95.46%	95.41%	97.77%
Satellite dish	5,974	91.11%	0.39	46.80%	43.03%	60.00%
Personal computer	5,974	26.46%	0.51	12.89%	12.55%	23.52%
Radio	5,974	57.40%	0.53	72.76%	73.84%	82.30%
Refrigerator	5,974	96.08%	0.33	90.95%	91.65%	96.89%
Washing machine	5,974	47.00%	0.57	94.11%	18.90%	97.85%
Fan	5,974	91.75%	0.39	91.56%	92.17%	94.07%
Water heater	5,974	65.53%	0.53	36.18%	36.27%	53.65%
Watch	5,974	80.21%	0.46	88.67%	89.93%	96.37%
Livestock	5,974	21.11%	0.45	27.48%	26.32%	20.86%
Status						
Full- or part-time employ.	5,974	34.28%	0.47			
Self-employed	5,974	20.77%	0.41			
Unpaid family worker	5,974	1.81%	0.13			
Apprenticeship/internship	5,974	0.35%	0.06			
Av. and act. look. for work	5,974	20.62%	0.40			
School training/studying	5,974	7.05%	0.26			
Home duties	5,974	12.49%	0.33			
Not seek. work or training	5,974	2.63%	0.16			

and the collection of the sample data. Interestingly, study respondents appear to be more interested in new technology than the average Egyptian, being more likely to own a television and a personal computer and to have access to cable TV. This broadly confirms our assumption that respondents would be exposed to mass media and would have the opportunity to watch El Mashrou3.

- Interestingly, 72.92 per cent of batch 1 respondents and 89.11 per cent of batch 2 respondents are male. It seems that respondents are less likely to think of women when asked about friends who meet our inclusion criteria – or possibly that it is less socially acceptable to provide an unknown questioner with the contact details of a female friend. Also, batch 2 respondents are on average one year younger than batch 1 respondents (25.96 as opposed to 26.98). Not surprisingly, an email address was more frequently provided for batch 1 respondents than for batch 2 respondents.
- Among batch 1 respondents, individuals who shared the contact details of at least one friend have different characteristics from those who did not share the contact details of any of their friends. Individuals who shared the contact details of at least one friend are more likely to be younger males with a higher level of education. They are also more likely to be employed (either full or part time) and less likely to have domestic commitments. The differences in wealth between the batches are unexplained, although batch 1 respondents appear to be more technology-oriented, with a larger share of them having an email address and a personal computer (although slightly fewer of them have a TV set).

Some of the differences between this study sample and the 2008 DHS sample could be due to selection issues during the sampling process, while other differences could be explained by our inclusion criteria. This is particularly clear when we compare our sample with the DHS sub-samples that match our inclusion criteria as closely as possible: some of the differences partly disappear, and therefore cannot be attributed to any problems that may have arisen during sampling. Unfortunately the DHS database does not contain any data on its respondents' desire to start a business, which limits the conclusions that can be drawn from such comparisons.

In conclusion, we cannot exclude possible deviations from the data collection guidelines – and, consequently, selection bias affecting the randomization process. On completion of the endline survey, balance checks will be conducted to control for this potential bias and to assess the representativeness of the study.

Section 4: Impact evaluation

4.1 SMS prompts

Once the study's sample population and design had been determined, we could establish the treatment and control groups. Subsets of the sample population were selected at random to receive text messages encouraging them to tune in to the El Mashrou3 show.

Table 4 sets out the text messages that were sent to treatment group members between 18 January and 1 April 2014, using the online platform SMS Misr (www.smsmisr.com/).

Table 4: Text messages sent to treatment group

Episode no.	Date	Message (in English)
5	Sat. 18 Jan.	Do you want to watch a reality TV show that has action and drama and shows you the skills needed to become a successful entrepreneur? Watch El Mashrou3 on Al Nahar tonight at 11 p.m.
6	Thu. 30 Jan.	Want to learn how to start your business? Create your free account at elmashrou3.tv
6	Sat. 1 Feb.	Tonight on Al Nahar at 11, watch entrepreneurs in the kitchen on El Mashrou3!
7	Thu. 6 Feb.	You have been selected to participate in a game: watch El Mashrou3 every week and answer a short survey testing your knowledge of the show when it ends. You may win a Samsung tablet. Information: 010 2511 7112.
7	Sat. 8 Feb.	Tonight on Al Nahar at 11, learn how to plan business events on El Mashrou3!
8	Thu. 13 Feb.	You have been selected to participate in a game: watch El Mashrou3 every week and answer a short survey testing your knowledge of the show when it ends. You may win a Samsung tablet or other prizes. Information: 010 2511 7112.
8	Sat. 15 Feb.	Tonight on El Mashrou3 (Al Nahar, 11 p.m.), contestants face an exciting challenge in the desert!
9	Sat. 22 Feb.	Tonight on El Mashrou3 (Al Nahar, 11 p.m.), contestants learn how to advertise their business!
10	Sat. 1 Mar.	Watch El Mashrou3 on Al Nahar tonight (11 p.m.) – contestants organize exciting fashion shows, the last challenge before the grand finale!
11	Mon. 3 Mar.	Want to go beyond the show? Need advice, online courses or micro-finance loans to start your business? Create your account at elmashrou3.tv and you'll find all the information you need to start your business
11	Sat. 8 Mar.	Watch El Mashrou3 on Al Nahar tonight (11 p.m.) and see how successful entrepreneurs judge contestants' business plans!
Quiz	Tue. 1 Apr.	Log on to elmashrou3.tv and answer our quiz before 15/4 to win a Samsung tablet.

The number of text messages sent was subject to budget constraints. Messages advertising the show were prioritized, as these were the main component of the intervention and the most interesting from an academic point of view.

All the treatment group members were also sent text messages during the first two weeks of April, encouraging them to watch El Mashrou3 episodes on YouTube and to take part in a quiz on the show's website.

4.2 Randomization

The randomization process happened at the individual level, with participants stratified by batch number, gender and number of friends in the cluster. Three treatment groups were established:

- **T1:** Individual *i* received the text message her/himself.
- **T2:** Text messages were sent to at least one of individual *i*'s friends (subject to batch 1 respondents having supplied friends' contact details at baseline).
- **T1*T2:** Text messages were sent to both individual *i* and at least one of their friends (again, subject to batch 1 respondents having supplied friends' contact details at baseline).

Table 5: Characteristics of treatment groups

Variables	#	$\beta 1$	pv	$\beta 2$	pv	$\beta 3$	pv
Male	9,327	+0.04 pp	0.975	+1.63 pp	0.252	+0.48 pp	0.796
Age	9,327	+0.15	0.276	+0.26	0.155	-0.18	0.432
Shared an email address	9,327	+1.07 pp	0.278	-0.26 pp	0.832	-0.17 pp	0.910
Education level							
No education	5,967	-0.31 pp	0.637	-0.02 pp	0.982	+1.50 pp	0.171
Primary education	5,967	+1.37 pp	0.225	+0.92 pp	0.647	-2.17 pp	0.341
Secondary education	5,967	-2.64 pp	0.071*	-1.24 pp	0.655	-0.23 pp	0.941
Higher education	5,967	+1.57 pp	0.240	-0.33 pp	0.898	-0.90 pp	0.759
Location							
City gov.	5,974	+0.71 pp	0.588	+2.74 pp	0.265	-6.80 pp	0.013**
Lower Egypt gov.	5,974	+0.11 pp	0.936	-2.59 pp	0.335	+3.38 pp	0.265
Upper Egypt gov.	5,974	-0.32 pp	0.818	+0.30 pp	0.909	+2.79 pp	0.344
Frontiers gov.	5,974	-0.50 pp	0.179	-0.45 pp	0.604	+0.62 pp	0.507
Status							
Full- or part-time employed	5,974	+1.58 pp	0.252	-0.11 pp	0.968	-4.32 pp	0.150
Self-employed	5,974	+0.45 pp	0.703	+2.48 pp	0.268	-1.32 pp	0.605
Unpaid family worker	5,974	+0.18 pp	0.650	-0.30 pp	0.692	-0.66 pp	0.426
Apprenticeship/internship	5,974	-0.13 pp	0.385	+0.00 pp	0.990	+0.43 pp	0.344
Actively looking for work	5,974	-1.00 pp	0.399	-0.24 pp	0.915	+3.02 pp	0.238
Training/studying	5,974	-0.83 pp	0.267	-2.09 pp	0.145	+2.12 pp	0.182
Domestic commitments	5,974	-0.53 pp	0.596	-0.51 pp	0.737	+1.49 pp	0.415
Not seeking work or training	5,974	+0.28 pp	0.547	+0.78 pp	0.366	-0.77 pp	0.433

This table reports any difference between the three treatment groups and the control groups for a subset of background characteristics. Statistically significant differences are marked with stars as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ "pp" stands for "percentage points". Standard errors clustered at the friend group level are calculated.

These three treatment groups will allow the researchers to measure the respective impact of sending the encouragements to an individual, to her/his friends and measure whether or not sending the encouragements to both an individual and her/his friends has any ripple effect.

Table 5 shows that these three groups are similar, although there are a few small differences between them (for example, in terms of enrolment in secondary education).

4.3 Tracking survey: preliminary data and take-up rates

In order to provide early information on the take-up rates for the text messages and estimate the statistical power of the study, preliminary data were collected in advance of the full endline survey. In total, 6 per cent of the entire sample (558 respondents from both batch 1 and batch 2) were contacted at random.

Data were collected during the first two weeks of October 2014 on a range of indicators, in order to measure whether treatment respondents reacted to the text messages and the intensity with which they reacted.

So that measurement errors and data collection bias could be limited, enumerators were not informed whether respondents were in the control or treatment group, and were asked to read the following sentences to respondents prior to asking the questions on take-up rates:

Thank you so much for your time. The questionnaire is almost over and there are just a few questions left about two TV shows – whether you watched them, browsed their website and attended the events organized around the shows. There are no right or wrong answers so, based on what you can remember, please answer the questions as accurately as possible.

Respondents were then asked a set of questions about The Voice, another popular TV show in Egypt, before being asked the exact same set of questions about El Mashrou3. Questions successively asked respondents about the TV show, El Mashrou3's website, social media accounts and events:

- Have you ever heard of the El Mashrou3?
- Since January 2014 (last year), have you ever watched El Mashrou3?
- Since January 2014 (last year), how many episodes did you watch approximately?
- What did you like the most about the show?
- Were you able to relate with the contestants?
- Since January 2014 (last year), did you visit El Mashrou3's website?
- How many times?
- Since January 2014 (last year), did you follow El Mashrou3 on social media? (Facebook, Twitter, Instagram)
- Since January 2014 (last year), did you attend any event organized by El Mashrou3?

As part of this exercise, data were also collected on outcome variables such as respondents' aspirations, beliefs, their assessment of their entrepreneurial skills and their assessment of the economic barriers that might prevent them from starting their business. Finally, data were collected on their economic and employment status.

As data from this preliminary survey continue to be collected and analysed, they cannot be presented in this report. These data will be made available as part of the endline report.

Section 5: The El Mashrou3 TV show

5.1 Concept

Bamyan Media believes that humanity has always been guided by stories, and that combining television with new media allows for powerful new ways to share ideas that can inspire action and create profound social impact. This is especially the case now that over 95 per cent of Egyptian households have access to a TV set (DHS, 2008) and spend a significant amount of time watching television (40 per cent of Egyptians watch up to four hours of television per day according the Arab Media Outlook 2011-2015). Moreover, an ever growing number of Egyptians now have access to the internet.

In 2010, Bamyan Media was awarded a grant by USAID to promote entrepreneurship and job creation in Egypt. After a year spent working with over 30 local partners, Bamyan produced “The Project” (“El Mashrou3” in Arabic).

The objectives of El Mashrou3 were to:

- use the power of mass media to inspire a new generation of young entrepreneurs
- teach the practical steps required to launch a successful business
- connect people on and off screen with practical resources that could turn their business ideas into reality
- improve the teaching of entrepreneurship in schools and universities.

It was estimated that between 4.1 per cent and 9.3 per cent (an average of 6.7 per cent) of the Egyptian population aged over 15 watched at least one episode of El Mashrou3. This represents between 2.44 and 5.54 million Egyptian viewers, given that there are 86 million people in the country and 69 per cent of them are over 15 years old. Between 5.2 per cent and 12.8 per cent (with an average of 9.0 per cent) of these viewers were estimated to be aged between 18 and 35.

According to Bamyan Media, more than 3,500 individuals have already applied to take part in the second series of the show, although production has been delayed.

5.2 Format

In the 13 episodes of the TV show, 14 young entrepreneurs competed in an eliminatory entrepreneurship competition that led to the winner receiving a substantial prize to allow them to start their own business – their “Mashrou3”. This comprised US\$49,000 in cash, a Samsung Note 3 mobile phone, a Samsung 46” LED TV and a Samsung DA-F680 docking station.

The show featured contestants from different backgrounds who all shared the objective of starting their own business and becoming successful entrepreneurs. They were selected to ensure that the maximum number of viewers would be able to relate to at least one contestant: half of the contestants were women and, although most of the candidates lived in Cairo, they originally came from different regions of the country. Various social classes were represented, and contestants belonged to different ethnic and religious groups (some spoke explicitly of this, while others did not). Some had years of experience as entrepreneurs, while others just had their business plans, and a number were focused on social entrepreneurship. Appendix A provides information on each of the contestants.

Throughout the first ten episodes, contestants competed against each other in various challenges designed to test their entrepreneurial skills. Tasks ranged from selling fruit juice in the street to organizing a trip for tourists. In each episode, contestants were placed in two opposing teams. Appendix B provides information on each of the 13 episodes.

During the last episodes of the show, finalists had a chance to return to their own projects and make a pitch to a panel of judges.

5.3 Outreach activities

El Mashrou3 served as a catalyst for a year-long series of events that ranged from castings and entrepreneurship fairs to viewing parties, short business model workshops and tours of university campuses by cast members. These events encouraged the practice of entrepreneurship by promoting both the TV show and partner organizations. Partner organizations subsequently received an increased number of applications for training, mentoring and financial support. At the same time, these events generated press coverage, which gave further visibility to the Egyptian entrepreneurship ecosystem and may have contributed to the creation of an environment more supportive of self-employment.

Various types of events were organized:

- Networking events. Exclusively organized by Bamyam Media, two types of networking events were held: events where potential entrepreneurs and partner organizations could mingle, and events for partner organizations alone. These events took place during and after the broadcast of the show and sometimes involved the participation of El Mashrou3 contestants; this allowed them to share their experiences as entrepreneurs and to connect with their fans, who in turn were able to receive feedback on their own business plans.
- Entrepreneurship camps. Two four-day training camps were held to teach entrepreneurial skills and help young people start their own business.
- Viewing events. Public viewing events were held in tandem with social media and partner organizations.

There was a large popular response to the show, with thousands of individuals attending El Mashrou3 events. Bamyam Media estimated that more than 36,000 people were connected with local resources for micro-finance, mentoring, training and development.

In parallel, Bamyam Media reached out to teaching assistants and professors who were willing to use the TV show as a learning tool. Educational organizations such as INJAZ were also contacted with the aim of linking El Mashrou3 with educational programmes.

5.4 Online activities

In its attempt to connect with a larger audience, Bamyan Media made extensive use of online communication tools to deliver information on events and local resources. As part of this strategy, it created a website dedicated to the TV show (www.elmashrou3.tv) and disseminated information through social media accounts, in particular Facebook, Google+ and Twitter. Episodes and additional videos were also made available on YouTube and Vimeo (see Appendix B for links to the episodes).

This strategy was intended to provide potential entrepreneurs with tips on how to start a business. It also aimed to create an online community of individuals interested in starting their own business, and to offer free information on organizations that could provide training, mentoring, finance, etc.

Although website traffic figures have proved modest, social media figures are much more encouraging, indicating that these media are a promising way to reach out to young people. Over 850,000 Facebook users and 300,000 users of Google+ are following El Mashrou3.

References

- Arab Media Outlook 2011-2015 – Arab Media Exposure and Transition, Forecasts and analysis of Traditional and Digital Media in The Arab World*. Dubai Press Club, UAE, 4th edition. 2012.
- Barsoum, G., M. Ramadan, and M. Mostafa. *Labour market transitions of young women and men in Egypt*. ILO, 2014.
- El-Zanaty, F. and A. Way. *Egypt Demographic and Health Survey 2008*. Cairo, Egypt: Ministry of Health, El-Zanaty and Associates, and Macro International, 2009.
- Roushdy, R., C. Krafft, C. Harbour, G. Barsoum, and S. El-Kogali. *Survey of young people in Egypt: final report*. Cairo, Egypt Population Council, 2011.

Appendix A: Contestants



Sherif Hosny

Social entrepreneur, 36, Cairo

The oldest contestant on the show, Sherif has a strong character, often acting as a leader: he believes he is always right. He is self-confident and can easily get angry when things do not go his way. Although he is from a wealthy background, he cares about less privileged people.

His project is to develop a YouTube channel to give everyone the opportunity to express themselves and be heard by a large community. As part of his project, film crews would travel all over Egypt giving people the opportunity to share their ideas and opinions. Sherif predicts that his videos would start by being posted on the internet, but would be broadcast at prime time on a major TV channel within a year.



Omneya Al-Kadi

Social entrepreneur, 27, Cairo

27-year-old Omneya is an extremely hard-working person who will not rest until she reaches her goals. Though lacking in leadership skills, Omneya makes up for this by being extremely thorough and well-organized. She is also a great team player. She aims to have an impact on Egyptian society by helping the poor.

Omneya's project "Merit Hotab" aims to solve the housing and unemployment problems of Egyptian young people by building new sustainable and environmentally friendly communities in the desert. She has carried out extensive research on the subject and has already created partnerships with NGOs and the Housing and Building National Research Centre. In addition to these communities, Omneya plans to create a research centre dedicated to the promotion of the green economy.



Mostafa Metwally

Social entrepreneur, 26, Alexandria

Mostafa is an ambitious young man who really wants to learn and grow as an entrepreneur. While his eccentric (even goofy) character makes him stand out from the crowd, Mostafa has great talent and is well aware of his potential. He likes to think of himself as a visionary and has ambitious plans for his future.

Mostafa's idea is to develop an online educational tool called "Beyond More" that would help young Egyptians learn better by adopting an interactive and

entertaining approach. As part of his project, parents would be kept in the loop with regular progress reports.

**Asmaa Hassan**

Social entrepreneur, 32, Sohag/Cairo

Now living in Cairo, Asmaa grew up in a poor family in Sohag. Although she can sometimes underestimate her abilities and could improve her organizational and leadership skills, Asmaa is a strong, resourceful, determined and self-reliant individual.

Her project is to develop a company that would connect craftspeople with buyers and wholesalers. With her in-depth knowledge of the Egyptian handicrafts market, Asmaa plans to distinguish herself from others in the field by developing new interior design products.

**Abdel Hamid Rashad (“Mido”)**

Business entrepreneur, 26, Cairo

Mido comes from a large family of 12 brothers and sisters. He is a strong person with plenty of charm, who is now working as a T-shirt seller on Talaat Harb Street in central Cairo, where he is well known for his elaborate sales techniques. However, Mido is looking beyond his current situation and wants to start a business and earn more money.

Mido’s plan is to move from selling T-shirts to manufacturing and distributing T-shirts, jackets and other menswear items. In order to do so, he plans to rent a room, buy two machines and hire skilled workers.

**Sara Batrawy**

Art/social entrepreneur, 26, Cairo

Sara is kind, gentle, hard-working and intelligent. She left a stable job in order to start her own business. Although she lacks business skills, she is resourceful and is likely to have a bright future as a businesswoman.

Sara’s project is to create a puppet show that would travel all over Egypt, entertaining both children and adults while raising awareness about human rights and other social issues.

**Reham Gehad**

Business entrepreneur, 29, Cairo

After studying fashion and make-up at university and working for one of Egypt’s most famous salons for seven years, Reham decided to quit and start her own business. Although she lacks basic business skills such as business planning and finance, she is risk-taking, resourceful and determined.

Reham has already established a business called “Swan House”, which specializes in selling make-up and fashion products. Her plan is to establish branches in a number of governorates (Cairo, Giza, Port Said and Upper Egypt) over the next five years and start selling worldwide.



Fadwa Attia

Art/business entrepreneur, 28, Alexandria

Fadwa is a 28-year-old Alexandrian woman who likes to stand out from the crowd. She is outspoken, artistic, expressive and very hard-working. Although she lacks basic business skills, she is a born leader and likes getting things done.

Fadwa's project is to develop the company she recently created, which specializes in the production of original T-shirts. Her plan is to create T-shirts using designs inspired by Oriental art, Arabic calligraphy and Arab pop culture. Fadwa believes that her products will be internationally renowned one day. She also wants to diversify and start selling Egyptian handicrafts, candles and other products.



Yostina Boules

Social entrepreneur, 24, Cairo

Despite her dentistry background, Yostina sees her future career as a venture capitalist. She is a very determined and self-reliant risk-taker. However, she lacks proper business skills, including business planning and financial management. Full of life and very competitive, Yostina has a strong personality and is proud of her Christian heritage.

Yostina's project, "Kepri Biomass", aims to promote the development of biogas through livestock farming in Egypt, as well as in the MENA region more generally.



Tharey El Din Haggag

Social entrepreneur, 22, Aswan

Tharey is a Nubian from Aswan, a region of Egypt with a rich culture whose inhabitants are proud of their vibrant heritage. When Tharey sets his mind on something, it is impossible to steer him away from it.

Tharey's project is to create a factory that would produce Nubian handicrafts and employ people with special needs and disabilities, who are frequently excluded from the labour market.



Sherly Ahmed

Artpreneur, 21, Cairo

Sherly is a contemporary dancer who sees dancing as an essential form of self-expression. She is young, modern and loves to attract attention.

Despite the wave of conservatism that Egypt has witnessed over recent years, Sherly would like to open a dance school to teach children and adults different types of dance. Classes would be mixed and prices would be moderate so that the middle classes could afford them. Scholarships would be awarded to children and young adults with talent who could not otherwise afford to attend.

**Farag Moussa**

Business entrepreneur, 20, El Arish

Farag is a Bedouin from Sinai. He comes from an important tribe and is proud of his heritage. Very sociable, Farag is an ambitious young man who already has big plans for his future. Although he can be calculating, he is also very supportive of his friends, and jumps in to help whenever anyone needs him to.

Farag's idea is to buy olives cultivated in the Bir el Abd region and become the first local producer of refined and bottled olive oil. As part of his project, Farag aims to employ many other young people who are suffering as a result of unemployment and the government's employment policies, which discriminate against Bedouins. He hopes to sell his olive oil throughout Egypt, and even to export it.

**Mostafa El Nahawy**

Business entrepreneur, 21, Cairo

Mostafa comes from a family that is deeply rooted in the Egyptian entrepreneurial world and sees a bright future for himself. He is self-confident and cares a lot about his appearance. Originally from Mahalla, he attended both government and public schools and now lives between Cairo and London. Mostafa thinks of himself as someone with a rich and diverse background. He is spontaneous and likes to travel the world.

Mostafa's plan is to develop his company "Inca", which currently creates designs and colours for products like bean bags and cushions. His plan is to diversify the company's product range and start selling beachwear and home fabrics.

**Islam Hamed ("Semo")**

Artpreneur, 26, Cairo

Semo always says what is on his mind, even if this sometimes means hurting people. The thing that matters most to him is remaining true to himself. He even threw away everything he owned during the revolution to buy a camera and pursue his dream of becoming a famous photographer. He is a fighter who is determined to win the show.

Semo's project is to create a cultural arts centre that would serve the community by organizing art workshops, concerts, seminars and courses in filming, editing, drawing, sculpting and dancing. Semo's ultimate goal is to create a space for free expression and creativity.

Appendix B: TV show episodes

Episodes 1 and 2: “Buy ten items”

Summary of episode	Contestants were placed in two different teams. Both teams were given a list of ten items to find and buy. The objective was to do this as quickly and cheaply as possible. The winning team was the team that managed to acquire all ten items in the eight hours allotted for the task.
Skills tested	Organization Problem-solving Teamwork Communication Leadership Planning Working under pressure
Candidate eliminated	Mostafa Metwally
Links to episode	Episode 1: https://www.youtube.com/watch?v=EEom6toR_Go&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9 (in Arabic) Episode 2: https://www.youtube.com/watch?v=oF1BO_Ozl8M&index=3&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9 (in Arabic)

Episode 3: “Juice stand”

Summary of episode	The task was to invent a new fruit juice cocktail and sell as much of it as possible. Contestants were placed in two teams and had to buy fruit and a cart to sell their product from. Each cart was to be customized to better suit the needs of the exercise. The juice was prepared and then sold. The winning team was the one that made the biggest profit.
Skills tested	Organization Accounting Sales Problem-solving Teamwork Communication Leadership Planning Working under pressure Innovation Perseverance
Candidate eliminated	Asmaa Hassan
Link to episode	https://www.youtube.com/watch?v=r3rOJSYcin0&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9 (in Arabic)

Episode 4: “Restaurant makeover”

Summary of episode	Teams had to plan and implement the reopening of a restaurant within 48 hours. Each team was given seed funding of 6,000 EGP. Teams had to choose between four restaurants. In particular, they had to find out from the owners why the restaurants were not doing well and carry out research into the surrounding areas. Teams had to create a new identity for their restaurant: this involved repainting the walls, redecorating, reorganizing the seating, printing flyers and menus and even finding a new restaurant sign.
Skills tested	<ul style="list-style-type: none"> Organization Public speaking Accounting Sales Problem-solving Teamwork Communication Leadership Risk-taking Planning Working under pressure Perseverance Market research
Candidate eliminated	Farag Moussa
Links to episode	https://www.youtube.com/watch?v=T4yrHpNF4Lk&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9&index=5 (in Arabic) https://vimeo.com/88010666 (with English subtitles)

Episode 5: “Trash to cash”

Summary of episode	This task involved buying industrial waste from the Zabaleen area, using it to create a home accessory and then selling this to the owners of homeware shops. Teams were allowed to buy extra materials (such as cloth, cables and glass) at the beginning of the challenge for no more than EGP100. Contestants had to practise selling, set up meetings with shop owners and try to secure as many orders as possible. The team with the most orders won.
Skills tested	<ul style="list-style-type: none"> Organization Public speaking Accounting Sales Leadership Innovation
Candidate eliminated	Fadwa Attia
Links to episode	https://www.youtube.com/watch?v=zb14QBx_SOg&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9 (in Arabic) https://vimeo.com/90526189 (with English subtitles)

Episode 6: “Home catering”

Summary of episode	This challenge involved helping a housewife who worked in home catering to develop her business. Teams met four housewives, tasted their food and chose one housewife each to support. Contestants were only allowed to use ingredients available in the cook’s kitchen but could buy any materials required to deliver the food. The team that secured the highest number of orders won.
Skills tested	Problem-solving Teamwork Communication Leadership Working under pressure Innovation Perseverance
Candidate eliminated	Reham Gehad
Link to episode	https://www.youtube.com/watch?v=3h6a1_nPRi8&index=7&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9 (in Arabic)

Episode 7: “Street performance”

Summary of episode	This challenge involved organizing a street performance. Teams chose the performers they would work with by watching several videos. They then held a brainstorming session, during which they had to draft a work plan, including details of how they would organize the performance. Contestants were responsible for advertising the show and collecting the ticket money.
Skills tested	Sales Problem-solving Teamwork Innovation
Candidate eliminated	Sara Batrawy
Link to episode	https://www.youtube.com/watch?v=jLLEpN6zlvY&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9&index=8 (in Arabic)

Episode 8: “Safari tour”

Summary of episode	This challenge involved organizing a trip to the desert for a group of tourists. The trip had to include breakfast, lunch, dinner, camping and entertainment, and be suitable for individuals of all ages and tastes. Both teams presented details of their trip to two groups of tourists, each of which picked the one they preferred. A guide was available to take tourists to the desert campsites, but he could not get involved in any other aspects of organization or management.
Skills tested	Organization Public speaking Sales Problem-solving Teamwork
Candidate eliminated	Tharey El Din Haggag
Link to episode	https://www.youtube.com/watch?v=hHFRFL6EwsA&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9&index=9 (in Arabic)

Episode 9: “Advertising campaign for social cause”

Summary of episode	<p>This task involved choosing a social issue and producing a 30-second video clip to raise awareness of that issue. Both teams had to choose one social issue following three presentations by a guest judge and representatives from NGOs. Each team was allowed to “spend” five points by choosing from the following list:</p> <p>cinematographer and camera = two points editor = two points sound engineer = one point additional camera and lighting = two points.</p> <p>Video clips had to be both creative and attractive, focusing on the chosen issue and conveying a convincing message to the public.</p>
Skills tested	<p>Public speaking Teamwork Risk-taking Planning Working under pressure Innovation</p>
Candidate eliminated	Sherif Hosny
Links to episode	<p>https://www.youtube.com/watch?v=0akh2BVRg_0&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9&index=12 (in Arabic) https://vimeo.com/91543558 (with English subtitles)</p>

Episode 10: “Fashion show”

Summary of episode	<p>This challenge involved organizing a fashion show, selecting designers, models and venues and facilitating an appealing and creative spectacle. Teams had to identify up-and-coming designers and models, purchase clothes in collaboration with the designer, and choose the location for the show.</p>
Skills tested	<p>Innovation Public speaking Organization Working under pressure</p>
Candidate eliminated	Abdel Hamid Rashad
Link to episode	<p>https://www.youtube.com/watch?v=E75D43_2ID4&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9&index=15 (in Arabic)</p>

Episode 11: “Interview from hell”

Summary of episode	<p>This episode consisted of a preliminary round of interviews before the grand finale. Throughout the preceding weeks, contestants had benefited from mentoring and training sessions. They were given 24 hours to finalize their business plan and were then asked to present it to three extremely successful entrepreneurs who interviewed them rigorously. This episode tested contestants’ levels of expertise and their chances of becoming successful entrepreneurs.</p>
Skills tested	<p>Public speaking Organization Working under pressure Communication</p>

Candidates eliminated	Islam Hamed Sherly Ahmed
Link to episode	https://www.youtube.com/watch?v=WYokmQiK-Xw&index=19&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9 (in Arabic)

Episode 12: “Flashback”

Summary of episode	Episode 12 provided viewers with a summary of the previous 11 episodes as a prelude to the grand finale.
Link to episode	https://www.youtube.com/watch?v=vBJAsK50ljE&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9&index=21 (in Arabic)

Episode 13: “Grand finale”

Summary of episode	In this episode, the remaining contestants presented their project in front of a panel of judges consisting of prominent business people and members of the entrepreneurship ecosystem. Prior to this, contestants received additional mentoring from several of the judges. After making their final pitches, contestants were questioned by the judges.
Skills tested	Public speaking Organization Working under pressure Communication
Final rankings	First place: Yostina Boules Second place: Omneya Al-Kadi Third place: Mostafa El Nahawy
Link to episode	https://www.youtube.com/watch?v=OapMqgMBwCk&index=26&list=PL6Hlr59ThJ2hXrPB-NvYktAPBzLxralo9 (in Arabic)



Evaluating the Effects of Entrepreneurship Edutainment in Egypt

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