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## Financial education via television comedy

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#### ABSTRACT

We show that television may be able to deliver rudimentary financial literacy in a cost-effective manner. In a controlled experiment, Cambodian garment factory workers were randomly assigned to one of three treatments: no video (baseline), slideshow and comedy TV show. After the intervention, to examine whether individuals were able to internalize the information that was provided, participants were asked to answer a set of questions on financial knowledge and attitudes. Our results show that participants randomly assigned to the comedy show are significantly more likely to report that they are interested in obtaining more information on savings accounts and are also significantly more likely to open a savings account in the next 6 months. This method of delivery may prove effective particularly for the disadvantaged sections of the population in remote regions of Cambodia.

#### **KEYWORDS**

Financial literacy; media; field experiment; Cambodia

JEL CLASSIFICATION O12; L82; C93

### I. Introduction

In recent years, mass media has penetrated large parts of the developing world with traditionally remote communities now having access to television and internet. It is argued that this could be used to achieve development goals: entertainment can have an educational role to play, leading to the term edutainment. Evidence from different parts of the world suggests that this is indeed the case.<sup>1</sup>

In this article, we examine whether mass media can be used effectively to improve financial literacy and consequently foster financial inclusion in developing countries. Television may be able to deliver rudimentary financial literacy to those most disadvantaged in a cost-effective manner. The promise of broadcast TV is that the financial education it delivers may prove effective as it will be accessible, memorable, and entertaining to a large audience of those normally excluded from financial services, particularly those belonging to disadvantaged sections of the population and those living outside the major cities.

The Cambodian Microfinance Association (CMA), in conjunction with the research team, produced a 5min comedy skit to be ultimately shown as prerecorded segment in a popular Saturday evening television show, one which is watched by 20% of the country's population. The episode involves a storyline mainly focussed on concepts relating to financial knowledge, loan management and savings. An advanced video of the episode was shown to randomly selected garment factory workers during their lunch break. A second randomly selected group of garment factory workers were shown a financial literacy slideshow video, which covered roughly the same material, but did not have any comedy content. After watching the respective videos, the participants were asked to participate in a survey to collect information on their financial knowledge and attitudes towards different financial products. The results were compared to that of a baseline group, which consisted of a third randomly selected group of garment factory workers who did not watch any video, but participated in the same survey as participants in the two treatment groups.

We find evidence that attitudes to savings accounts were significantly different for those who viewed the comedy show compared to those assigned to the control and the slide show, without going into explanations for these differences.

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<sup>&</sup>lt;sup>1</sup>These include improving the use of oral rehydration therapy (ORS), which reduced infant mortality in Egypt (Abdulla, (2004)), reducing violence against women in India (Jensen, and Oster (2009)); increased use of contraception and a reduction in drug use (Verner, and Cardoso (2007), Chong., Duryea, and La Ferrara (2012)) and increase in divorce rates, which is an indicator of female empowerment (Chong, and La Ferrara (2009)) in Brazil; and higher financial knowledge in South Africa (Berg, and Zia (2013)). See surveys by Della Vigna and La Ferrara (2017) and La Ferrara, (2016).

Furthermore, it appears that the video was more effective than the alternative delivery approaches in piquing workers' interests in savings accounts.

# II. Experimental design, sample and sample characteristics

Participants in the experiment were randomly allocated into one of three treatments: no video (baseline), slideshow and comedy. All experimental sessions were conducted in garment factories located in the Special Economic Zones that are located within 50 km of the capital city of Phnom Penh. The sessions were organized with the assistance of 'Cambodian Women the for Peace and Development', a NGO that organizes videos relating to topics like health awareness and HIV prevention to be shown in these factories.

The comedy treatment consisted of showing a video that was produced by the CMA. The slideshow treatment included a slideshow presentation prepared by the CMA. The length of the presentation was the same as the video, and the presentation covered similar topics as the video. Figure 1 presents the percentage of time spent on each component of financial literacy.

After the comedy video or slideshow video was complete, the participants were requested to answer

a set of questions. These questions were designed to obtain information on financial knowledge and attitudes and also whether individuals were able to internalize the information that was provided through the comedy show and the slideshow video. A team of research assistants conducted the surveys and each survey took approximately 20 min. Those assigned to the baseline group answered the same questions. The surveys were all conducted in Khmer on Samsung tablets using Open Data Kit (ODK) software. Garment factory workers represent a relatively uneducated group of individuals who might benefit from being financially more literate. Having respondents all in one location, provided us experimental control and facilitated data collection.

A total of 177 men and women participated in the sessions: 86 in the comedy treatment, 40 in the slideshow treatment and 51 in the control treatment. 88% of the participants in the experimental sessions were women and the average age of the participants is around 28 years; 44% of the participants have no children and 81% of the participants have completed primary schooling with 19% having completed secondary schooling. Statistically the three cohorts were the same: using a Kruskall–Wallis (K–W) statistic we cannot reject the null hypothesis that the participant characteristics were jointly different across the three groups.



Figure 1. Time allocation to different aspects of financial education in the video.

### III. Results

We find evidence of increased interest in savings accounts following the screening of the comedy video as compared to the other delivery methods. Of those who watched the comedy show only 5% are not interested in savings accounts compared to 21% of slideshow video viewers and 18% in the control group. The regression results in Table 1 (column 1) shows the likelihood of reporting interested or very interested is almost 14 percentage points (or 17%) higher in the comedy treatment than in the control treatment and almost 18 percentage points (or 19.5%) higher than in the slide show treatment. The results presented in Table 2 indicate that individuals randomly assigned to the comedy treatment report that they are significantly more likely to have their own savings account in the next 6 months.<sup>2</sup>

There is however no differential treatment effect on interest in microfinance or on the willingness to have a new microloan in the next 6 months. This is despite the fact that a large portion of the comedy video and the slide show devoted to articulating the

Table 1. Treatment differences in interest in information for savings and microfinance.

	Interested in savings	Interested in microfinance
	(1)	(2)
Treatment: slide show	-0.022	-0.136
	(0.057)	(0.109)
Treatment: comedy	0.139***	-0.071
	(0.054)	(0.086)
Average for control treatment	0.824	0.686
Equality of effects comedy = slide show	7.62***	0.43
x <sup>2</sup> (1)		
Sample size	177	177

Notes: Marginal effects from probit regressions. Robust standard errors in parenthesis. \*\*\* p < 0.01, \*\* p < 0.05, \*p < 0.10.

Table 2. Treatment differences in interest in having/learning more about.

	Saving account (1)	Microloans (2)
Treatment: slide show	0.093	0.004
	(0.105)	(0.086)
Treatment: comedy	0.168*	0.028
·	(0.089)	(0.073)
Average for control treatment	0.431	0.157
Equality of effects comedy = slide	0.58	0.10
show		
χ <sup>2</sup> (1)		
Sample size	177	177

Notes: Marginal effects from probit regressions. Robust standard errors in parenthesis. \*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.10.

benefit of microfinance (especially for small business). Indeed, 36% of comedy viewers, 38% of slideshow viewers and 32% of those in the control treatment replied that they are 'not interested' in microfinance loans for business. Over 70% of respondents in each group said they would not take out a loan in the next 6 months. This is corroborated by the regression results presented in column 2 of Table 1. This result is possibly a reflection of the fact that the part of the video devoted to microfinance was exclusively for microfinance business loans, not personal loans. Our survey suggests that this reported lack of interest might be due to a perceived lack of need – after all these are wage employees, with little interest in starting a business.

### IV. Conclusion

The positive and statistically significant treatment effectiveness for savings but lack of impact relating to loans may suggest that the comedy video format is helpful for increasing knowledge of products rather than promoting well known products.

The question that lies at the heart of our work is: How can we best educate the most disadvantaged in a developing economy so that they may enjoy the fruits of economic growth? Broadcast TV can deliver financial education in a cost-effective way across an entire country. Particularly in remote areas that are potentially most disadvantaged. Initially, the financial education needs to provide basic financial information in order that people understand what financial services are available to them and how they may benefit from them. Ideally, in order to be effective, the education should be simple and accessible. Despite the recent promotion of savings accounts by policy makers and governments in developing countries who are interested in using them for transfers, barriers preventing take-up of savings accounts in the developing world including access (e.g. proximity of branches, onerous paperwork) and business issues (e.g. lack of profitability of savings accounts providing disincentives to banks to offer them) continue to exist. In Cambodia, which is the location of our project, most garment factory workers could see the immediate benefit of savings accounts after watching the video and were interested in pursuing more information about them.

<sup>2</sup>Regressions control for individual level characteristics (age, gender, number of children, level of schooling and ownership of television).

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