

Same Language Subtitling (SLS) Study

A Note on Methodology

Background:

Planet Read (See - <http://www.planetread.org/>) has used Same Language Subtitling (SLS) to improve adult literacy in the past. The current study is to evaluate whether SLS can improve literacy particularly in children. ASER Centre (an independent research and assessment unit of Pratham) is conducting the baseline and endline of the SLS study as per the requirements stated by Planet Read.

The idea behind SLS is to present same language subtitles of songs/movies that children might be watching on TV. The subtitles of the song being played are carefully set to match the rhyme of the song. Matching what they see with what they hear will help improve children's reading skills.

Rationale of the study:

The objective of the study is to evaluate the impact of SLS exposure on the reading skills of children, aged 6-14, who are not fluent readers. The program has been rolled out in six districts of rural Maharashtra. The impact will be compared with outcomes in Gujarat (two districts of Gujarat are picked which have the same learning level as in Maharashtra) with no SLS telecast. Planet Read has tied up with the ZEE TV network in Maharashtra and Doordarshan Kendra, Mumbai to telecast films employing SLS in local language (Marathi). Both channels have decided to give Planet Read their most popular films viewed by 'school-age' children, for Planet Read to add the SLS sliders, which will only be added to the songs of the films and not the dialogues. The baseline was conducted in May-June 2013 and endline data is scheduled during the same period in 2015 (after two years of the baseline). Other than the learning levels of children (age group 6-14) information about TV viewing habits of children and adult members of the household were also recorded during the baseline visit.

Extent of study:

The baseline assessment was conducted in 6 districts in total. These were comprised of 4 Treatment Districts (TDs) of Maharashtra and 2 Control Districts (CDs) of Gujarat. The TDs and

CDs for impact assessment have been selected for the study based on the ASER data of 2010-12 which was provided by Pratham.

The TDs in Maharashtra, selected by Planet Read are:

- a) Wardha (medium reading achievement, high cable access)
- b) Parbhani (medium reading achievement, low cable access)
- c) Akola (low reading achievement, high cable access) and
- d) Nandurbar (low reading achievement, low cable access)

The CDs in Gujarat, selected by Planet Read are:

- e) Bharuch (medium reading achievement)
- f) Narmada (low reading achievement)

Timeline of the Assessment:

The baseline assessment in the above mentioned TDs and CDs was completed in 2013. The end line assessment is currently being carried out by ASER Centre and the endline data will be made available to Planet Read by mid June 2015.

Methodology of the study:

- **Sampling** – The sampling strategy used, generates a representative picture of each district. The study uses a two stage sample design. In each district, in the first stage, 30 villages are sampled from the Census 2001 village directory¹ using the Probability Proportional to Size (PPS) technique. In the second stage, 16 households are sampled randomly from each of the selected villages.² Therefore, in each district the sample size is 480 households.

The second stage of sampling was done using the ASER process. Each village was first mapped. It was then divided into 4 parts. In each part, surveyors were asked to start from the centre and select every fifth household proceeding from the left. Only households which had a TV and children in the age group of 6-14 years going to a government school or children who had dropped out of school were eligible.

¹ At the time of sampling the 2011 Census village directory was not in the public domain.

² With PPS, villages with larger populations have a higher chance of being selected in the sample. It is the appropriate sampling technique, when the sampling units vary considerably in size. Combined with random sampling in the second stage, it ensures that each household in the district has the same probability of being selected in the sample as those in smaller sites, and vice versa.

Investigators were asked to continue with the process, till they selected 4 such households in each part of the village.³

- **Survey Formats**

- **Household format** – To record basic information about the household such as name of the head of the household, number of members regularly living in the household, information of parents of the sampled child, etc. This format captures information for all children in the 6-14 age-group who are regularly living in the household and eating from the same kitchen. This format also notes basic socio-economic characteristics of the household.
- **Media Questionnaire for adults** – This format records information about TV viewing in the household.
- **Media Questionnaire for child** – This format was filled for each 6-14 year old child who is included in the study. This format captures the child’s TV viewing habits.

- **Reading Tools** – A granular tool was developed for this study to note any minor improvement in the reading level of the children. The levels in the tools are as follows:
 - Reading Exercise 1 –Letter recognition (40 letters)
 - Reading Exercise 2 – Simple words (20 words)
 - Reading Exercise 3 – Words testing the understanding of *matras* (10 words)
 - Reading Exercise 4 – Complicated words (20 words)
 - Reading Exercise 5A – ASER Paragraph (Std 1 level text)
 - Reading Exercise 5B – ASER Story (Std 2 level text)
 - Reading Exercise 5C – ASER Story+ (Std 4/5 level text)

Reading exercises 1 to 4 were developed by Planet Read and Reading Exercise 5 was developed by ASER Centre (Pratham)

³ This process ensures, as far as possible, a random sample of households from the village. The process of houselisting, which would have created a sampling frame for the second stage, was considered too expensive, especially in terms of time.

The following points are worth noting for -

(1) Exercise 1 to 4

Every child is asked to hold the sheet and move her finger on the sheet as she proceeds to read the alphabets/words. For each letter/word the child is marked at 1 (in a separate grading sheet) if she read it correctly.

(2) Exercise 5A, B, C

The child is asked to read text at different levels and marked according to her ability to read the text fluently. A child is considered to be able to read comfortably at a particular level, if she does so with 3 or less mistakes.

- **Implementation of the survey on field** – For each district one ASER/Pratham team member and a hired external investigator were trained as District Master Trainers (MTs). These Master Trainers trained 20 surveyors on the survey process in each district. A team of 2 surveyors went to each sampled village and completed the survey and testing procedure. For the endline assessment similar training and data collection processes are being followed. The households surveyed in the baseline are being tracked in the endline visit and the same children are being assessed.

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