1. Introduction

This document provides a report of a qualitative research study conducted over March and April 2016 in the urban slums of Jorashanko and Narkeldanga in the city of Kolkata. The study was commissioned in order to map the longitudinal effects of a sanitation and hygiene-based intervention conducted earlier by Sesame Workshop India (SWI) at the same venues. As the intervention took place about a year before this research study (2014-15), the purpose of the study was four-fold:

1. To map recall and recognition of the ideas, narratives and characters that were part of the intervention
2. To provide an understanding of any changes in attitude toward hygiene as a result of the intervention
3. To report any changes in behavior that may be attributed to the intervention
4. To point out at any other effects of the campaign within the community

It has been known for about a decade and a half now that child participation in various forms of community action benefits not only the community as a whole, but also the children concerned and their families. The Raho Swacch Jiyo Mast (RSJM) intervention by SWI was aimed at empowering children to be the change-makers in their communities with regard to hygiene, and it focused on three fundamental areas:

- Wear chappals to the toilet
- Use water in the toilet
- Wash hands with soap after going to the toilet

These messages were taught to children through several routes—stories, games (digital and small groups) and other activities including craftwork like the tippy-tap and soapy threads, featuring characters from the Galli Galli Sim Sim (GGSS) television program.
The body of this report details the findings of this study, and provides an explanation of both the larger sociological processes, and of the specific contexts, to map an understanding of this recall across time. Such explanations are important in light of the fact that children, depending on their environment, experience a fairly high degree of “overlay in memory”—children are famously distracted, and will move at speed from one experience to the next. Therefore, the fact that children remember certain details of the intervention speaks well of the vividness of the original experience of the intervention. Likewise, the details they appear to have forgotten provide opportunities for improvements in and additions to future programs and interventions by SWI.

### 2. The Intervention

The original intervention by SWI was carried out over 2014–2015 by SWI’s field partner in the urban slums of Jorashankho and Narkeldanga in Kolkata.

A brief introduction is provided to these materials, as respondents were asked about them:

1. **A3 sized hard-back flip-storybook**: A story in which Chamcham Basti is attacked by germs, and the attack is repelled by *Sabun Sipahi* (Soap Soldier); *Chappal Chacha* and *Chachi* (Slipper Uncle and Aunt); *Mugga Mama* (Mug Uncle), and *Paani Rani* (Water Queen), acting together. Participating children were told the story in a show and tell format by the field partners.

2. **Storybook**: The narrative was the same as above, but given individually to children. This gave them opportunities to play board games, draw and colour.

3. **Digital games**: Children played four games on SWI sponsored tablets at the intervention venue. The games were also made available for download on Google Play. These games were:
   a. *Karo Kitanu Gayab*: Killing emergent germs on an Indian-style toilet
   b. *Sabun Kare Saaf*: Bars of soap pop up and have to be dunked into a bucket
   c. *Chappal Ki Sair*: Player helps Raya get to her slippers as she waits in front of the toilet
   d. *Paani Ka Chamatkar*: Water has to be carried to the toilet to clean it, while avoiding germs

4. **Story pond**: A floor game using references from daily life—food, school, toilet etc. This game is used to build vocabulary and story telling skills.

5. **Origami finger toy (Tippy-Tap)**: An adaptation of the origami paper fortune-teller. In SWI’s version, each unfolding unit reveals an individual lesson in toilet hygiene, aiming to help
children remember toilet hygiene through repeated exposure to these ideas.

6. **Tap-bottle**: An easily adaptable mode for storing and dispensing water, made out of a plastic bottle. It is useful in environments where running water is scarce.

7. **Soapy thread**: Leftover bits of soap are melted in hot water by an adult, and strips of cloth or thread are soaked in the mixture. The resulting ‘soapy strips’ can be tied on a child’s wrist or otherwise easily carried to the toilet and used in lieu of soap.

In addition, the study aimed to find out if the yellow GGSS play bags provided by RSJM as a memento of participation in the program were still with the children, and if/ how children were using them. A room hired for the purpose at each venue became the point at which children of the area (locality, or para, pronounced pārā in Bengali) came to learn and play in the multi-pronged intervention devised by SWI.
3. Methodology

Since the original intervention was carried out a year ago, this study aims to map recall and recognition, and attitude and behavior change over time attributable to the intervention.

Qualitative research was selected as the methodological approach for research questions of this nature because it provides understandings of both context and complexity, providing answers to ‘why’ questions that understand issues and provide explanations, and ‘how’ questions that address behavior or processes. The social texture that qualitative data can show allows for layered explanations of phenomena that the survey-type information provided by quantitative information is not meant to provide. Where survey-type data calls for a large sample size and shorter, structured interviews, qualitative research demands longer, higher detail, semi-to unstructured interviews. Interviews typically last between 45 minutes to an hour and a half, or above—this is to allow for an understanding of the phenomenon in question from the point of view of the researched. The purpose of qualitative research is not so much to look for numbers, as to look for ‘rich’ patterns in reported attitudes, ideas and behavior.

3.1. Methods

Note that the methods listed below were used for both children and adult caregivers, unless specified otherwise.

1. **FOCUS GROUP DISCUSSION (FGD):** This method is useful for providing collective understanding of attitudes and processes. Children were selected for participation on the basis of their attendance at the intervention. Caregivers who had at least one child participating in the intervention were selected.

2. **OPINION LEADER PAIRS:** These paired interviews were conducted with somewhat older child participants in the original intervention. Now aged 9-12 years, their socio-educational backgrounds were very similar to their younger counterparts, with the difference that they acted as leaders during the original program, helping younger children learn behaviors in any way. This type of interview was only conducted with children.

3. **PARTICIPATORY RURAL APPRAISAL (PRA):** An approach used in the study of development. It is used to conduct research among populations in which literacy may not be high, and the research methodology calls for the participation of people over multiple degrees of literacy. The PRA approach is considered to be an empowering approach to use
with populations in developing areas’. This study uses a visual PRA technique, which asks participants to draw a kind of mind-map of the locality in which a participant lives, usually focusing on a particular kind of daily experience—food, play and many other elements can be mapped like this. In the case of this research, the focus is on hygiene. This is intended to be a personal, experiential map of the area, a filtered topography of sorts. The principle criteria for recruitment here was children and caregivers who can and enjoy drawing.

4. **REGRETS**: These were children who had wanted to be registered participants in the original intervention, but due to restrictions on the number of participants, could not. However, it turned out that several such children attended some activities anyway, although their attendance was more sporadic than that of the registered participants. The intention in including this sample was to see if there was a difference in the kind and degree of recall between registered and ad hoc participation in terms of recall and retention. This type of interview was only conducted with children.

5. **HOME VISITS**: The researcher visited the homes of children who had participated in the original intervention to understand the environments in which these children lived, and the spaces in which hygiene behavior is played out. Home visits included interviews with all significant caregivers, as well as the child her/himself.

Interviews lasted for just above an hour on an average, with individual interviews lasting between 45 minutes to an hour, and group interviews lasting up to about an hour and a half.
3.2. Sample

All sampling for the study was purposive, or judgment sampling, as used in qualitative research. Field personnel who had earlier run the intervention and were familiar with the children and communities who had participated, were provided a description of criteria for each kind of prospective participant in the sample (FGD, Opinion Leader, Regret etc.). They recruited participants for the research on the basis of these descriptions and their knowledge of the community.

Children—participants and regrets—and their salient caregivers were interviewed for the study. As this was largely a recall study, children, both participant and peripheral (in the intervention) are essential to the sample. However, children spend a large part of their time at home, and are subject to caregivers. Moreover, the South Asian mode of caregiving has been shown to include a high degree of power differential.

While it is possible that children are now challenging the ideas of their caregivers more than ever before, what is also true is that caregivers have a profound influence on the children in their care.

Among multiple other dimensions, they have the ability to reinforce ideas or diminish the importance of those ideas in children’s perceptions. If children have remembered the lessons and details of an intervention carried out a year ago, it is reasonable to assume that caregivers are somehow implicit in this phenomenon, and it is necessary to find out how. This is the reason for the inclusion of the relatively large caregiver sample in the study.
The sample for the study:

### Jorashanko

<table>
<thead>
<tr>
<th>Unit of Research</th>
<th>No. Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 3 Focus Group Discussions with children</td>
<td>26 (mixed gender FGDs)</td>
</tr>
<tr>
<td>2 3 Focus Group Discussions with caregivers</td>
<td>20 (all female caregivers)</td>
</tr>
<tr>
<td>3 3 Visual Participatory Appraisal maps with children.</td>
<td>3+3 (3 children, and 1 caregiver per child)</td>
</tr>
<tr>
<td>4 3 Visual Participatory Appraisal maps with caregivers</td>
<td>3+3+2=8 (also interviewed the children and other salient caregivers)</td>
</tr>
<tr>
<td>5 3 Opinion Leader Pairs</td>
<td>6 (3 male, 3 female)</td>
</tr>
<tr>
<td>6 2 Regret interviews</td>
<td>3+3 (3 children, 3 caregivers across interviews)</td>
</tr>
<tr>
<td>7 3 Home Visits</td>
<td>4+5 (4 children, and others in the home who help take care of the child)</td>
</tr>
</tbody>
</table>

No. of children: 26+3+6+3+4= **45**  
No. of caregivers: 20+5+5+5= **36**  
Total interviewed at Jorashanko= **81**
Narkeldanga

<table>
<thead>
<tr>
<th>Unit of Research</th>
<th>No. Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 3 Focus Group Discussions with children</td>
<td>28 (mixed gender FGDs)</td>
</tr>
<tr>
<td>2 3 Focus Group Discussions with caregivers</td>
<td>21 (all female, with one exception)</td>
</tr>
<tr>
<td>3 3 Visual Participatory Appraisal maps with children</td>
<td>3+3 (3 children, and 1 caregiver per child)</td>
</tr>
<tr>
<td>4 3 Visual Participatory Appraisal maps with caregivers</td>
<td>3+3+1 (also interviewed the children and other salient caregivers)</td>
</tr>
<tr>
<td>5 3 Opinion pairs</td>
<td>6 (3 male, 3 female)</td>
</tr>
<tr>
<td>6 2 Regret interviews</td>
<td>2+3 (2 children, 3 caregivers across interviews)</td>
</tr>
<tr>
<td>7 3 Home Visits</td>
<td>3+6 (children, and others in the home who help take care of the child)</td>
</tr>
</tbody>
</table>

No of children: 28+3+3+6+2+3= **45**
No of caregivers: 21+3+4+3+6= **37**
Total interviewed at Narkeldanga= **82**

Total number of participants in the study=**163**
Total number of children=**90**
Total number of caregivers=**73**
Please note that the data gathered from PRAs and opinion leaders are included in the data analysis and findings as reported in this study. Photographs of PRAs are included in Appendix 2.

Note also that the number of participants listed above is somewhat greater than those in the original plan. This is because the reality of interviewing people in crowded urban settings in the third world is that even out-of-sample people participate in interviews, in most cases because the key informant needs the extra person/s to feel comfortable giving an interview. Included in this category are siblings, close friends and caregivers (for children) and non-principal but nonetheless significant caregivers such as aunts, older siblings or other members of the family (when interviewing adult caregivers). As these additional people were also interviewed for their insights, they have been counted in the final report.

A question may be raised about why this presumably extraneous data has been included in the study. The answer to this question goes back to the reason for the study—the research was conducted to find out the degree and kinds of recall within the community in which the initial educational program was conducted. Part of the brief of this study included a call to understand if and how knowledge about the RSJM intervention had spread within the community, beyond the individual children who had been formal participants in the program.
Originally, a restricted sample was envisioned because of the various constraints (time, resources) under which the research operated. However, if others beyond the sample feature the characteristics of desired sampling units, and are brought to participate by relations and friends who are part of the sample, then, leaving out the valuable information they provide would be analogous to a sudden swerve towards positivist data collection principles within the context of a qualitative, process oriented study.

Moreover, much of this ‘extraneous’ data has proven to be quite valuable. Grandmothers, aunts, close friends, and other relatives are frequently in a position to provide information about children and their habits that only collective contexts of caregiving and play can provide. We have to remember that we are not in Northern contexts in which there are usually one or at the most two caregivers. In South Asian slums, the para children are loved and watched by most adults in the locality, and children feel the same way, freely running chores for para aunts and grandmothers, and calling their close friends brothers and sisters. From this perspective, the term ‘extraneous’ data is an imported concept, one that has to be adapted to environment and context in order to conduct meaningful and illuminating qualitative research in the slums of South Asia.

### 3.3 Venues for interviewing

At both Jorashanko and Narkeldanga, SWI rented a room in the locality to use as a base for the research. Opinion leader pair interviews and FGDs were conducted in this room. PRAs, home visits, and regrets were conducted at the homes of participants.

### 4. The Areas

Both areas are located in North Kolkata, and are crowded zones of urban sprawl. People live in small houses, in close proximity and ventilation is poor. Individual homes are quite small, in most cases no more than a single room between 10 and 15 feet square. All family members—between four and seven people, including children—live, sleep and store all their worldly goods in this single room, with the kitchen also located in this space. Only the toilet is outside the home, and in the case of every child or caregiver interviewed during this study, the toilet is shared by other community members.
Children play in their homes, or in the narrow lanes between houses. Both Jorashanko and Narkeldanga lack safe public spaces for children’s play, as the roads that surround these areas have constant traffic through most of the day.

The Narkeldanga slum did have a smallish open central area with a temple, but this is also used for other community-based activities, so the space for children to play, run or indulge in other active, rough and tumble games is very limited.

Jorashanko is economically ahead of Narkeldanga—some of the homes at Jorashanko have split air conditioning units—but the children of Narkeldanga seem to have fewer restrictions on their physical activities and movement. This may be attributed to three factors: first, that the traffic in Jorashanko is much heavier than that at Narkeldanga, which makes it difficult for children to move around alone; Second, Jorashanko presents a dirtier public environment than Narkeldanga, with waste and broken objects lying on the street and presenting the real possibility of bodily harm. Mothers say they are loath to let children play out of their direct sight. Third, this may be attributable to differing degrees of cultural conservatism, particularly with regard to girl children.
5. Report on the Ideas, Characters and Games Recalled by Children

This research study found that a year after the intervention was conducted, children across centers recalled all three messages, and salient characters from the original intervention. They also remembered the craftwork activities, and several were able to describe the steps to make both the tippy-tap and soapy threads with some accuracy.

**BASIC LESSONS:**

WEAR SLIPPERS WHEN YOU GO TO THE TOILET,
POUR WATER DOWN THE TOILET TO CLEAN IT,
AND WASH YOUR HANDS WITH SOAP AFTER USING THE TOILET

All children across Jorashanko and Narkeldanga remembered all three of these lessons. All means 100 per cent, since every child interviewed during this study, including children from the locality who played with participants, knew these three basic concepts taught in the workshop a year ago.

Please note that the percentage figures through this section are the result of a counting process conducted by the researcher while the interviews were conducted. During each unit of research, an informal log was kept to mark how many respondents remembered each element of the program. It is from this log that the percentage figures featuring in this section are drawn.
FLIP STORY BOOK

About half of all children interviewed in this study remembered the entire story in the flip book (all elements), and were able to tell the story through. Another 30 per cent remembered the bare outline of the story, but not details. Both categories of children, the first almost unprompted, and the second with some help from peers, told the story with dialogue and

“Fir Chappal Chachi ne Chappal Chacha ko kaha, arrey yeh kya ho gaya? Chalo, hum bhi madat karen”
Then Chappal Chacha told Chappal Chachi, how can this be? (the attack of the germs on Toilet Kaka) Come, let us help too
- Boy, FGD, Jorashanko

“Bahut saaray bade bade kala gande kitanu ne hamla kiya, hazar se zaada”
Many big black ugly/dirty germs attacked (Toilet Kaka), more than a thousand
- Girl, FGD, Narkeldanga

“Sabun Sipahi so rahen thay, Chappal Chacha ne usko utha diya, kaha, dekho kya ho raha hain.”
Soap soliders were sleeping, Chappal Chacha woke them up, and said, “look what's going on
- Girl, PRA, Narkeldanga

“Pani rani sabko kahan, main chalay ayi hoon toh sab theek ho jayega.”
- Girl, home visit, Jorashanko
actions:
It seems that children had remembered the story, and added in their own details. As assimilation—which includes integration of information with other, existing frames—is a large part of retention over time, this may be said to be both normal, and a positive sign of recall with regard to the RSJM intervention.

The popularity of characters, in order of number of mentions across interviews (number of mentions across interviews are in parentheses):

*Kitanu (germs)* (465 mentions)
Very popular with children. Kitanu are thought as villains in a movie, acting for inexplicable and malevolent reasons. Younger children (below 7 yrs) report that they have teeth and claws, or some kind of sucker mechanism that lets them hang onto people (*lag jaata hain / atak jaata hain / jhulay poray*). See picture below, in which children were asked to show the researcher what *kitanu* look like.

Children (above 7 yrs) for a large part report knowing that they are invisible to the naked eye, but also feel that they can climb onto people, specially through the feet—hence the importance of wearing slippers. Children across age groups felt that they could make you sick, with a variety of ailments—*Beemar / jor* (illness/ fever), *sardard / mathabyatha* (headache), *shordikashi / khasi* (cough and cold),

*peyt me dard / peyt byatha* (stomach ache), dengue, malaria, typhoid etc. In the context of children’s understanding of illness, it is interesting to note that the routes of germ carriage are undifferentiated in the minds of these children. All germs are “*kitanu*”, and will make you sick. The worst part of falling ill through “*kitanu*” is not being able to go to school, or being restricted from playing with friends. Given the small size and poor ventilation of the homes of these children, it is not hard to imagine that staying at home sick can hardly be a desirable outcome.
**Chappal Chacha** (323 mentions) and **Chachi** (310 mentions)

While **Chappal Chacha** gets the most mentions as a stand-alone, **Chappal Chachi** is close behind. This disparity in number of mentions for a pair that is meant to be conceptually linked can be explained by the fact that when children are talking in a hurry, which children tend to do in FGDs when they are trying to get in words edgewise, they mention only one of the pair and move on. Thus the first name may be seen as a representative of both, rather than an act of forgetting the second name, given how many times the second name was also mentioned across interviews. Even more interesting, children in both locations gestured toward their slippers (in view, or just over the threshold) when mentioning these characters, thus displaying that they have retained the real-world connection with these fictional figures.

At Jorashanko, children reported a shop just outside the mohalla (locality) where you could get **Chappal Chacha-Chappal Chachi**. Verifying this information from local volunteers revealed that while the intervention was on a year ago, and for some months thereafter, a local footwear shop on the main road had indeed displayed a sign saying that you could get **Chappal Chacha-Chappal Chachi** there. Although the sign was no longer hanging at the shop, children apparently still think of it as a place to get **Chappal Chacha** and **Chachi**.
Toilet Kaka (294 mentions)
Toilet Kaka is largely a passive figure in the perception of the children. He gets attacked and yells for help, and is rescued by the other characters. His popularity seems to stem largely from sympathy at being a blameless victim “Nobita jaisa” (from the TV show Doremon) said a girl at Jorashanko. It is to be noted that while Toilet Kaka has multiple, and affectionate (smiling) mentions in conversation when referring to the intervention, the ‘Kaka’ was dropped and only ‘Toilet’ was the preferred term of reference when referring to the personal act of going to the toilet. However, the fact that the anthropomorphic device is meant to represent the real toilet is clear in children’s minds.

Sabun Sipahi (252 mentions)
Sabun Sipahi is the rescuer from illness, along with Paani Rani (239 mentions)

“Sabun Sipahi sabko surakshit rakhta hain” / Sabun Sipahi keeps everyone safe.

“Sabse zaroori hain Sabun Sipahi” / Sabun Sipahi is the most important.

“Woh kitanu sain lartay hain” / They fight with germs.

“Sabun Sipahi aur Paani Raani sain haath pair dhonay say kitanu mar jaatay hain” / Germs die if you wash your hands and feet with Sabun Sipahi and Paani Rani.

“Paani Rani Sabun Sipahi ayksaath kaam kartain hain” / Paani Rani and Sabun Sipahi work together.

“Sabun Sipahi haath main lo, fir Paani Rani daal kay haath dho” / Take Sabun Sipahi in your hand, then pour Paani Raani and wash your hands.

“Paani Rani aur Sabun Sipahi aanay say kitanu dar kay maaray daur jaatay hain” /
Germs run away in fear when *Paani Rani* and *Sabun Sipahi* arrive [From FGDs across Jorashanko and Narkeldanga]

*Mugga Mama* (213 mentions)
Also occasionally called *Mugga Chacha* or *Mugga Kaka*. This character gets the least mentions in large part because of the believable and very liked anthropomorphic nature of *Paani Rani*, who is referred to someone with personal mobility—“*Paani Rani aur sabun sipahi daur kay chale gaye*”/“*Paani Rani* and *Sabun Sipahi* ran there”. In this context, *Mugga Mama* is not necessary to the action, but he functions as another character in the story. This mirrors the way in which children talk of going to the toilet—“*chappal payn kay, paani lay kay jaana chahiyya*”/“you should wear chappals, take water and go”. The mug remains an unmentioned presence, since it is impossible to carry water without a vessel, a fact of which children were well aware.

**TAKE HOME ACTIVITY BOOK**
About 60 per cent of children interviewed said that they still had the activity book from last year at home. They have used it to draw and color in, as well as for the games in the book.

These books were much liked not only by the participating child her/himself, but also by neighboring children and younger siblings and cousins, who have been told the story, and, in special cases of favouritism, been
allowed to color and draw in the book. Of those who did not have the book at home anymore, most said that the book had been given away or thrown away by their mothers, while cleaning the house. The size of the houses in which these children live makes this believable, as constant spring-cleaning must be needed to keep these very small areas habitable.

Please note that the take home storybook features the characters in the flip storybook discussed in the previous paragraphs.

**DIGITAL GAMES**

Of the four digital games, ‘Karo Kitanu Gayab‘ emerges the clear winner. When asked about video/phone/tab games, 85 per cent children brought up the “Toilet Kaka waalaa game“ unprompted. When playing the games during the research, it was clear that children across centers remembered exactly how the game was to be played, and chose level 3 and above to play it, scoring well in it. Unfortunately, scores from this play were not recorded in the research, as children tended to get very excited when asked to play this game, and became noisy and restless, rapidly passing the tab from one to another, or arguing with others for a chance to play this prized game.

Observation of children playing the digital games revealed that the tapping motion that this game requires was an easy, comfortable motions for most children, whereas the swiping or dragging motions required for the other three games were not as comfortable (the perfect friction of the swipe/drag seemed to present some difficulty). About 10 per cent of children remembered the soap-in-bucket game, and a negligible number remembered the other two. None of the children, or their caregivers has downloaded these games from Google Play, very probably because of the quality of internet received by these slum areas, as seen by the researcher on caregiver’s phones, and on the basis of complaints about internet access from participants.

Participants at Jorashanko were particularly bitter about the problems with internet access because a large Bharat Sanchar Nigam Limited (BSNL) office was located on the main road right in front of the slum, but the internet speed they received in the slum area was very slow.
STORYPOND
This was remembered as a fun game to play with didis and dadas (facilitators). The physical aspect of the play involved in this game is remembered with particular fondness—“ekdum is side say us side pair rakhna parta tha” (“We had to stretch from this side to that to put our foot”). However, while the memory of playing this game is a happy one, the remembrance of the contours of the game itself seems somewhat weak. Children recalled that the play involved an aspect of physical fun, but were for the most part not able to recall the units on the surface of the story pond except ‘school’ and ‘toilet’ (both were recalled by 11 children across centers).

ORIGAMI FINGER TOY (TIPPY TAP GAME)
Children loved this, and treated it as an extension of the origami fortune telling toys they make for themselves at home. During FGDs, children were provided the flat sheets on which the toy was printed, and asked to make the device. The goal of this device has been described in Section 2, Unit 5.

Four-five older children in each FGD could still fold the device in a few minutes, and this is clearly seen as a prized skill among their peers. Tellingly, even children who could not properly fold the sheets were able to predict with fair accuracy what one would see next when unfolding particular corners of it. Every child asked about this device who said they had owned a tippy tap game, also said that they played with theirs until it fell apart.

Children claimed that they learned about going to the toilet from this toy, because they could take it home and play with it repeatedly.
Both children and caregivers reported the making of tippy-tap bottles while the intervention was on last year. About 70 per cent of the children interviewed in the course of this research were able to accurately describe the complete process of how to make a tippy-tap bottle, and how it worked to release water.

It seems that tippy-tap bottles were in use at Jorashanko up to four-six months before the research was conducted. At Narkeldanga, the use of these bottles did not reportedly persist beyond a month or so after the intervention ended. Given this, it is remarkable how clear the making and use of tippy-tap bottles are in the minds of children.

SOAPY THREADS
Like the tippy-tap bottle, soapy threads were also clearly remembered by children across centers, but called by different names “woh sabun waalay kapde” “sabun ki sooti” “sabaner dori”. About 60 per cent of children could describe how to make soapy strips, and recalled having made and used them while the intervention was on last year. Continuing use was low (about 10%, sporadic) mainly because mothers did not have the time to help make the boiled mixture, or did not want to spare a vessel for this exercise. Given that kitchens normally had only a few vessels each, this may be seen as a material constraint. From a hygiene point of view, however, the lack...
THE GGSS BAG
The yellow bag which was given to participants is reportedly still around the children’s environment. Only about 15 per cent of children interviewed said that they did not know where the bag was at the time of the research. Current uses include storage of art materials; for toys and pieces of games (Carrom counters, Ludo pieces) and for extra-curricular classes such as dance.

Some mothers have reportedly decreed the bag too nice for regular use, and packed them away in plastic. Other mothers have given the bag away to younger siblings, nieces or cousins. In every case this has happened, it has been against the wishes of the child participant. Mothers are pleased that the bag is made of good materials and washes well.
OUTSIDE ACTIVITIES

Both children and caregivers report enjoying the open-air ‘TV show’ very much. Raya emerged as the favorite character for children there, followed closely by Elmo. The story of Elmo forgetting his slippers and being reminded by his older sister Raya has been remembered as a good story with something important to teach. Another happy memory from the intervention is the time the children were taken to meet Raya, where they reportedly had a lot of fun together.

5.1 Regrets

The children who have been classified as ‘regrets’ had, in every case, attended the intervention sporadically, usually with friends who were participants. However, they remembered feeling bad that they were not a part of the intervention, and did not get a book, a finger toy and a bag, and also could not play the games regularly.

All the children interviewed in the category of “regret” were able to tell the researcher the three rules of toilet hygiene, but with more hesitation and less fluency than that shown by participants. When asked how they know this information, their responses were evenly divided between from the intervention, and from friends. Only one “regret” remembered the story of the activity book, which his friend, who was a participant, had let him play with and color in.
6. Analysis

Please note that analysis was conducted with all of the data gathered during the fieldwork. This includes all group and individual interviews, home visits and PRAs. The results of this analysis are reported below. Please consult the Appendix for images of child and adult PRAs conducted during this study.

6.1. Lessons

As briefly mentioned in the introduction, every child interviewed remembered the three fundamental lessons taught by the intervention, viz., wearing chappals to the toilet, using water in the toilet, and washing your hands with soap after going to the toilet.

“Chappal pehenkay, bade mug may paani laykay toilet jaana chahiay. Wapis aakay Sabun Sipahi se haath dhone chahiay.”
“Wear slippers, take water in the big mug and go to the toilet. Come back and wash your hands with Soap Soldier.”
- Girl, PRA, Narkeldanga

“Choti na porlay kitanu laygay jaabay, shorir kharap hobay. Toh choti poray toilet jaowa uchit (...) agay poray jol dhala-o dorkar (...) Hoye jaowar poray shaban diyay haath na dhulay kitanu laygay jaye.”
“If you go don’t wear slippers, you will get germs and fall ill. So you should wear slippers to the toilet, pour water before and after (...)”
- Girl, Opinion leader, Narkeldanga

“Chappal, paani, sabun, yeh toh sabke liye hain.”
“Slippers, water, soap, these things are for everybody.”
- Boy, FGD, Jorashanko

“Sabun, Chappal Chacha-Chachi, Paani Rani le kar jaata hoon.”
“I go (to the toilet) with Soap, Slipper Uncle and Water Queen.”
- Boy, FGD, Jorashanko
While about a fifth of children interviewed did not get the order of the first two messages correct i.e. wearing slippers and water usage, all listed the third message i.e. using soap as the last of the three.

The confusion in order between the first and second messages may be explained by the fact that both slippers and water storage buckets are usually kept near the threshold of the home/room. Therefore, depending on the usage layout of the home, the act of filling a mug with water to carry to the shared toilet may, in experience, precede the act of wearing slippers to go out.

About half of all children interviewed said that they also learned that it was important to wear footwear before going anywhere outside the home.

6.2. Behavior
Every caregiver interviewed said that their children now habitually wear slippers while going to the toilet, carry water, and use soap.

"Hyan, meye’r shob monay achay, oi jol, choti, tarpor shaban diyay haath dhowar byapar."
“Yes, my daughter remembers everything, water, chappals, washing hands with soap afterward."
- Mother, FGD, Narkeldanga

"Acchay se seekh liya, mujhe aur kehna nahi padta hai."
“(Her younger brother) has learnt well, now I don’t have to remind him.”
- Older sister, home visit, Jorashanko

The researcher saw the slippers (rubber or plastic, brightly coloured in the case of younger children) just outside the threshold of the homes visited for PRA or home visits. This footwear looked scuffed as if it was used for daily wear, not new and shiny. Additionally, in every case of a child leaving the venue of the interview to go to the toilet, the child first put on footwear before leaving. They did this without hesitation or stumbling, as if it was a natural act. Children claimed in interviews that this is what they do all the time, and that the slippers they use are their own, not shared.
While relying solely on children's self-report may not be a good idea in this matter, the triangulation of consistent caretaker reports in interviews and observation during the period of research can be taken as a measure of proof that children do in fact remember meaningfully the lessons learned during the intervention, and have accepted those lessons into their behaviour.

It may be somewhat problematic to entirely attribute the very existence of this behavior to the RSJM intervention a year ago. Mothers say that they have always told their children to do these things:

“Har time kehna padta tha, chappal pehno, khulay pair bahar mat jaana.”
“I used to have to say wear your slippers, don’t go out barefoot, every single time (the child went out).”
- Mother, FGD, Narkeldanga

“ore chotobelar thaykay ami bolchi, choti poro, saban diay haath dho”
“From the time (he) was much younger, I’ve been telling (him) to wear slippers and wash (his) hands with soap”
- Mother, home visit, Narkeldanga

In all fairness, mothers would be unlikely to admit that they have not insisted upon healthy behaviors from their child before the intervention. In their eyes, this would make them open to being judged by their peers, and the out-group researcher, as unworthy mothers. However, if they have indeed always instructed their children to engage in healthy behaviors, why then would the SWI intervention—which is then presumably simply repeating what mothers have apparently always said—be welcomed? What is the source of the very high approval that this research saw among caregivers of the RSJM intervention a year ago?
“Dono bacche jaatay thay, roz jaatay thay (…) Mujhe bhi bahut accha lagta, acche cheez seekh kay aatay thay, aakay mujhe kehtay thay, amma, didi-logne kaha chappal pehno, pani lo, sabun har time use karo.”
“Both my children would go (to the intervention) everyday (…) I liked it very much too, they would learn good things, they would come back and tell me, “Mother, the didis say wear slippers, carry water, use soap every time.”
- Mother, PRA, Jorashanko

“Isse accha kya ho sakhta hai? khel khel main yeh sab swachhta ki baat seekh gaye!”
“What could be better than this? They learned all these health matters through play.”
- Mother, home visit, Narkeldanga

“Bachhe ko bahut pasand aaya tha. Jo cheezein seekhi thi, jo cheezein khareedi thi thay, woh sab istamal karte hain. Abhi bhi chappal pehen ke bathroom jaatey hai, Mugga Mama bolte hain, Toilet Kaka boltey hain”
“Children liked it very much. The things they learned, the things they brought, they are still using them. They are still going to the toilet wearing slippers, saying Mugga mama, Toilet Kaka.”
- Mother, FGD, Jorashanko
A mother demonstrates how to wash hands properly, she was taught by her daughter, who attended the RSJM workshop:

7. The Role of ‘Outside’ Learning

Caregivers at both areas, with one exception\(^{\text{xi}}\) mothers, were uniformly in favor of the intervention because it had been so good for the children (please see next section for details). With some probing, it emerged that although mothers had reportedly always told children to engage in healthy hygiene behavior, children regarded this type of admonishment as just another dimension of the repeated nagging to which their mothers subjected them, on a variety of matters. So, while a child would occasionally listen, and less often obey, most such directives would be met by the indifference children habitually and cross-culturally reserve for mothers when they scold and nag.

“Main kehti hoon, toh sunne ki zaroorat nahi hain, magar bahar se koi kahega, toh ek minit me sun lenge, seekh lenge.”

“When I say it, there’s no need to listen, but if someone from outside says it, (her children) will hear it, pick it up in a minute.”

- Mother, FGD, Jorashanko
“Amon noye je ma’r kotha shonay na, kintu aajkal bairer jinish aei beshi akorshon”
“It’s not like (she) doesn’t listen to mother, but nowadays the fascination is with outside things.”
- Mother, PRA, Narkeldanga

“Mummy ki baat aajkal kaun sunta hai? Duniya main itni saari nayi cheezein sikhane wale hai.”
“Who listens to a mother nowadays? There are so many new things to learn in the world.”
- Mother, FGD, Jorashanko

“School thaykay ki shob shikhay ashay, ami oshob bujhí na.”
“I don’t quite understand the things (he) learns in school.”
- Mother, Home visit, Narkeldanga

This notion of the outside and inside (the home) is clearly divided in the minds of mothers. It is important to clarify here that the ‘outside’ as it emerged in these interviews is both a real/physical, and a conceptual space. The real/physical space comprises of school, friends from school, tuition, dance/art class, and any other outside interactions. It also includes food and drink from outside. The conceptual space is made of textbooks, video games, and cartoons on television.

In the life of the child, the mother reigns inside the home. Fathers emerge as a somewhat distant and uninvolved presence. Mothers consider themselves almost wholly responsible for the wellbeing of the child, and her/his future success. A related factor to consider is that most of these mothers are homemakers. Those who work, do so either from home or quite close to home, making their mobility somewhat restricted.

The ‘outside’ emerges as an object of some suspicion in the minds of these mothers.
‘Outside’ is where their children disappear to learn new things, and then come back with ideas to which they cannot relate. School is necessary and important because it makes for future success, but because these mothers are largely illiterate, the ideas their children learn in school are also inaccessible to them. In fact, the inability of principal caregivers to help children with their schoolwork is what has led to the development of an enormous after-school private-tuition industry in this countryxii.

What this means is that the mother’s role (traditionally considered of enormous importance) is now limited to the physical care of the child, and is needed far less along larger learning and knowledge dimensions. Mothers, therefore, tend to view the ‘outside’ with a measure of jealous suspicion, as something that takes away their children for periods of time, and returns them changed.

It would be reasonable to assume that mothers would extend this suspicion of ‘bahar ki cheez’ ‘baiyrer jinish’ (notions from outside the home) to the RJSM intervention, which, after all, did exactly what they seem to dislike—take the child away from home, and return her/him with notions from the ‘outside’. This, however, was absolutely not what the research saw, quite the contrary. Mothers repeatedly urged the return of the intervention, saying it was a good one and that it benefited their children, with the benefits persevering over time. Analysis of the data showed a very interesting reason for this phenomenon.

The behavior change with regard to hygiene that has reportedly occurred in children in the last year is perceived to have lightened the load of responsibility for mothers. Where they earlier had to constantly keep an eye out to see if the child was carrying water to the toilet, and washing their hands with soap—another chore added to the already long list of things they do—now they feel assured that the child will do these things without devoting a share of their already stretched energy to this.

“*Akhon shobshomoy choti poray jaye, jol diye dhoye, saban lagaye (…) khabar agayo akhon saban diye haath dhoy. Amkay aytay are dakhtay hoye na.*”

“Now (she) always wears slippers (to the toilet) washes it with water, uses soap (…) now she also washes (her) hands before eating. I don’t have to look after this any more.”

- Mother, PRA, Narkeldanga

*Mother 1: Ab har time chappal pehen ke bathroom jaiyega, wahaan jayega, sabun se haath dhoyega, paer dhoyega.*

*Mother 2: Aur sabun maangega,*
kahega bathroom jaana hai
Mother 3: Hyan, mujhe to kehta hain sabun nahi dene se bathroom nahi jayega!
Mother 1: “Now, (the child) always wears slippers to the bathroom and toilet, washes hands and feet with soap”
Mother 2: “Yes, and (the child) will ask for soap, saying I want to go to the bathroom”
Mother 3: “(child) tells me that (child) will not go to the bathroom if I don’t give soap!”
- Extract from FGD, caregivers, Jorashanko

Far from having to keep a watch on children to ensure these behaviors, caregivers reportedly now have to stock up on quantities of soap and water, because their children insist upon it. Mothers laugh about this recent passion for cleanliness, but they also feel that it is a good thing. “Fayededar”, “fayda hain”, “accha”, “bahut accha”, “bhalo” and “laabh” (good, of benefit), were words that were spoken repeatedly in conversation about the intervention, with the terms “swasthi”/”swastha” (health) featured prominently.

So not only has the woman’s direct responsibility for her child’s hygiene behavior been reduced, the RSJM intervention also did not run contrary to her beliefs or understanding of the world—they actually reinforced her teachings to her child. Here was a case of outside learning that complemented a mother’s ideas of benefit to children, and the research found out from both mothers and children that when a child has forgotten or slipped up on the lessons from the intervention over the last year, the caregiver has reminded her/him, thus reinforcing the original learnings in the child’s mind.

In this, the RSJM intervention may be regarded as having provided very effective learnings for the context—out-of-home lessons that children enjoyed, and that are periodically reinforced by in-home approval.
8. The Space

Apart from the larger conceptual spaces of inside and outside as defined by caregivers, the physical space of the RSJM intervention emerged as very important in the study.

“School say aakay, ek minit main bag ghar main rakh kay, daur kay program chala jaata tha.”
“(He) would return from school, take a minute to drop his bag at home, and rush off to the program (RSJM intervention).”
- Older sister, home visit, Jorashanko

“Dupur thaykay ghori daykhto, jay (program) kokhon shuru hobay (…) shomoy jayi hoto, ma, jacchi, bolay chutay bayriay jeto, kayu ruktay parto na.”
“She would watch the clock to see when the program was due to start (…) as soon as it was time, she’d tell me she was leaving and run off, no one could stop her.”
- Mother, home visit, Narkeldanga

Such narratives of impatience to get to the space of the RSJM intervention were told by several caregivers interviewed in the study. In response to questions about why they liked the place so much, children were very clear.

“Bahut maza aata tha.”
(“It was great fun.”)

“Hum saaray time khayltay thay, kahani suntay thay.”
(“We would play the whole time, listen to stories.”)

“Dada-didi log sab acchi baat sikhatay thay, khel khilatay thay.”
(“The facilitators would teach good things, and make us play.”)

“Woh Chappal Chacha Chachi wali kahani sunatay thay, drawing bhi hota tha, accha se time kat le the.”
(“They would tell us the story about Chappal Chacha and Chachi, we
would draw, time would pass in a good way.”

“There was fun with friends, and my mother would not object to it.”

“They would make a toilet and teach how to use it properly. I liked this very much.”

“I would play games and they also gave a lovely book of pictures (…) the bag was also very nice, I still have it.”

-from children’s FGDs across Jorashanko and Narkeldanga

The RSJM intervention provided a perfect place for children to spend their playtime and was also considered safe by mothers because it kept children out of public spaces, and indoors with competent supervision. About half the mothers interviewed had visited the space in the early days of the intervention, and been relieved to see that the space was safe and play was supervised. Other mothers reported that they were happy to let their children attend the intervention because they had met the people running the intervention, and seen that they were responsible adults who would take care of the children. Importantly, children seem to have regarded the space as their own—caregivers were by and large not encouraged to visit.
“Mainay ek-do baar kaha ki main bhi chalti hoon, magar usne toh ekdam mana kar diya.”
“Once or twice I said that I’ll come too (to the space), but (she) totally forbade it.”
- Grandmother, PRA, Jorashanko

“Kokhono jayay dito na (…) ora toh bachhader bhalo koray dyakhashona korto, toh amar jaowar dorkar porto na.”
“(The child) would never let me go (to the space) but they (the field partners) would take good care of the children, so there was never any need for me to go.”
- Mother, FGD, Narkeldanga

As discussed earlier, the learnings that children brought home from the RSJM intervention were also a factor that relaxed the women’s constant vigilance of their children. In the interviews, it was clear that the space of the intervention was regarded as a safe space, in which life skills are learned through games and play.

The learned skills have implications on two levels: First, the direct skills learned (how to use the toilet, how to wash your hands properly with soap, how to make the tippy tap bottle and soapy strips) have implications on physical behaviour. The second level of learning is that of the implications these skills have on the lives of children, which have to do with life skills for a better future.

Both children and their mothers identified good hygiene behaviour as necessary for a better future.

“Yeh haath dhona, chappal pehen kay toilet jaana, yeh sab seekhnay say bhavishya accha hota hai.”
“washing hands, going to the toilet with slippers, all of this is good for the future.”
- Boy, FGD, Jorashanko

“Sheek i toh bolto, kotha na shunlay kitanu laygay jaabay, shorir kharap hobay (…) shorir kharap holay porashona kora hobay na, tarporay golla!”
They were right, if you don’t pay heed to what they taught, germs will get you, then you will fall sick, then you won’t be able to study, then zero for the future!

“Amma bhi kehti hain ki saaf-swasth nahi rehney se bade hokar mushkil hoti hai”

(Like the intervention) Mother also says that if I’m not clean and healthy, that will be a problem when I grow up.

- Girl, FGD, Jorashanko

While it is difficult to tell if these attitudes existed in this population before the RSJM intervention last year, what can certainly be claimed is that the intervention has been instrumental in consolidating the clean-health-future linkage for both mothers and children.


The research study showed that the process of this consolidation was more complex than a straightforward understanding of the linkage between health and the future. To explain this, it is necessary to take a few steps backwards and refer to the part of the research that asked children about their favorite subjects in school and their favorite non-study occupations.

When asked about subjects in school, 40 per cent of all children interviewed reported that their favorite subject was English. Another 10 per cent said it was math. The rest were divided between Hindi, Bengali and Urdu. The children who said their favorite subject was a language had no trouble explaining why. They said they liked the stories and poems; that it was well taught at school; that caregivers helped them study these subjects at home, or that they found it easy. When asked, these children were able to recite/tell a portion of a poem or story, some with a degree of elocution talent. Those who liked math said either that they had good teaching from school, home or tuition; or that learning math was useful for the future, since it led to a better life. Three of the children who liked math pointed out that money and math are linked.

Compared to this clarity of preference, not one of the 40 per cent of children who claimed that English was their favourite subject was able to define exactly why. The descriptors are somewhat vague: ‘accha hain!’ it’s good, ‘theek se parhna chahiyyay’! one should study it.
properly, ‘bad mein zaroorat hoga’/ I’ll need it later, ‘shobai bolay ingrijii bhalo koray para uchit’/ everybody says you should study English well. Moreover, not one of these children could actually speak a complete sentence in English or read, even English textbooks, fluently. It is somewhat counterintuitive that children would like something a great deal, when their competence at it is low to the point that a great deal of effort is required to perform even a basic task (speak/ read a sentence) in it.

A study conducted in Peru, which in the context of language is in a situation similar to India, threw up an interesting phrase in this regard—“English is like the dollar”

In India too, the English language is considered key to a better life, particularly in terms of a better future for children. In material terms, it is difficult to find non-manual work that does not need at least a smattering of English, and currency and official papers are predominantly in English. In this environment, an expressed liking for English may be considered in large part an aspiration for the future, and an expression of the idea that learning English will lead to a better life.

Among these children, English is clearly a phenomenon ‘outside’ the home. Not a single caregiver interviewed spoke English, and there was no presence of English anywhere in the homes visited for the study across centers, except in children’s schoolbooks. The only family members speaking halting English were elder brothers or sisters, who were in the same generation as the child participants.

Another aspect of the English ‘outside’ in these children’s lives is media, predominantly cartoons and video games. Even though cartoons are shown on television translated into Hindi, children still identify them as being part of an aspirational ‘outer’ life, of which English is an important component. While further research is needed to map the contours of this phenomenon, the research study pointed to it being associated with a look/ visuality that is alien to these children’s everyday humdrum lives, in which the outside, English and a better future are interlinked.
The materials for the RSJM intervention seem to have slotted neatly into this paradigm of aspiration for a better life. They looked like the cartoons and video games the children are familiar with, told vivid stories like these media, and provided learnings that helped more towards a better future. It would be reasonable to arrive at the conclusion that, along with reinforcement from home, this has been a significant factor in the remembering of the intervention, and the internalisation of the learnings into behaviour.

This is relevant to SWI who ran the RSJM programme, because it implies that they were able to design and put forward to children, media and materials that allowed them to experience, even for a restricted time, a dream of a better life in the future.

10. The Social Role of the Child

“The promotion of children’s participation in concrete actions that improve their living conditions, to which adults and local authorities also contribute, is a strategy oriented to transform the democratic culture, not only of children, but also of their community. The goal is a culture in which girls and boys are recognized as social subjects capable of contributing to transformation in their surroundings”

The principal social effect of the RSJM intervention in the lives of child participants seem to have been a rise in confidence and perception of greater power within the environment.

“Iske baaray mein kisi koh bhi bataa sakhti hoon.”
I can talk about this (hygiene) to anybody
- Girl, FGD, Jorashanko

“nahin, kisi ne mana nahi kya (…) kyunki hum to theek bataa rahen hain, ismay sabki bhalai hai.”
No, no one told me not to (…) because I am saying the right thing, it is for everyone’s welfare.
- Boy, home visit, Narkeldanga

“Kaun kahega ki swasthya mein problem hona acchi cheez hain, kitanu ache hain?”
Who will say that bad health is a good thing, that germs are good?
- Girl, opinion leader, Jorashanko

About 80 per cent of the children interviewed in the study said that they had corrected the hygiene behaviour of peers and/or elders, which may be counted as a measure of confidence in South Asian children. They said this with happiness and assurance, with the conviction that they were correct in their ideas, and that they were helping others.

"School main ek friend hain, woh haat theek say nahi dhota hain, usko mainay sikha diya”
I have a school friend who would not wash (his) hands properly; I taught him how to do it
- Boy, home visit, Jorashanko

"Koi bacche theek se paani nahi daltay hain, toh main unko batati hoon (…) pados ke do larkay ki didi ko keh diya, ki dekho paani daalna chahiyan. Abhi woh log bhi theek say dho dete hain.”
If some children don’t wash (the toilet) properly, I tell them (…) There were two neighbor boys who did not, so I told their
older sister that water needs to be used. Now even they wash (the toilet) properly.”
- Girl, Opinion leader, Jorashanko

“Nani ko har time kehna parta hain, sabun ke baaray main (…) maan lete hain, main jaise kehti hoon, kartay hain (…) magar bhool jaatay hain, phir kehna parta hain.”
I have to always remind my grandmother to use soap (…) she does as I say when I tell her (…) but she forgets, and I have to tell her again
- Boy, PRA, Narkeldanga
Five children—four at Jorashanko and one at Narkeldanga reported doing this in the face of resistance. One girl at Jorashanko reported a story in which she and her friend followed two ladies from a house on their lane while they were returning from the toilet, and stopped them as they were going back into their home, informing them that they had not poured water in the toilet or used soap.

"Toh usne kaha tu (emphasis) kaun hota hain yeh sab kehnay wala? Main teri (emphasis) baat kyu sunu? Toh mainay kaha, woh Galli Galli Sim Sim waalay programme mein hum logon ko sikhaya, is liye yeh sab pata hain, fir woh chup ho gaya."

She said who are you (emphasis) to say these things? Why should I listen to you? (emphasis) So I said, that Galli Galli Sim Sim program taught us this, that’s why we know these things, then she (the neighbor) was quiet.

She added, consideringly:

"Agar ek baar bhool ho toh aisi karnay ki koi zaroorat nahi hain, magar woh log roz hi bhool jaatay."

If it was forgotten one time then there would be no need to do this, but they forgot every day.

Caregivers noted a change in their children during the intervention, and claimed that the change had persisted through time:

"Joh seekh kay aye, bacche, bade, sabko batatein hain. Pehlay itni baat nahin karti thi"

She tells what she learned at the intervention to everybody. (She) never spoke this much before.

- Mother, PRA, Jorashanko

"Ghar main bade log ko bhi keh dete hain, haath sabun se dho, paani nahi liya? (...) woh program say seekh kay aye (...) haan, abhi bhi karta hain."
He tells everyone at home, even the elders, wash your hands with soap, didn’t you take water? (...) he learnt this at the program (...) yes, he still does it.
- Aunt, home visit, Narkeldanga

“Abhi bhi kabhi kabhi mujhe kehna padta hain, arre chup reh, iske baaray main itna mat bol...mera beta kehta hai nahi mummy, kitanu lag jayenge toh sabko bura hoga.”
Even now I have to tell (him) sometimes, keep quiet, don’t talk so much about these things (...).
My son says, no, mother, the germs will harm everybody.
- Mother, FGD, Jorashanko

The Baitulmal Kelabagan High School at Jorashanko is the best illustrative example of a collective change story found by this research study. This is not a high school in the North American sense. It has children as young as 6 yrs attending and it has morning, afternoon and evening sessions to accommodate these students. Many of the children in the area who participated in the program study at this local school. A critical mass of these young hygiene conscious students wanted the school administration to change its own hygiene practices.

Apparently, after learning about the consequences of kitanu (germs) at the programme, a number of children (got together and realized that their school toilets were not clean enough, and that they may fall ill if they continued to use them. So they complained to the teacher, but nothing happened. Then they started going in pairs and complaining to the headmistress. When nothing continued to happen, they formed groups to go and complain to the headmistress about the state of the toilets. Ultimately, a meeting was called on a Saturday with the ‘secretary’ (bursar/governor) of the school, and new rules for
cleanliness were put in place. Now the toilets are washed every day, and there is always water in the toilets. Soap is also available. These facilities have been provided by the school.

11. The Difference between Jorashanko and Narkeldanga

Research showed that the process of this consolidation was more complex than a straightforward understanding of the linkage between health and the future. To explain this, it is necessary to take a few steps backwards and refer to the part of the research study that asked children about their favourite subjects in school and their favorite non-study occupations.

While children at both centers remembered the three basic lessons of the intervention (wear chappals, use water, wash with soap), and both children and caregivers reported the operationalisation of these rules in daily toilet use, there was a clear difference in the amount of details of the intervention remembered across centers.

This was mostly revealed in the difference in prompting it took for children to remember the story, games, characters and action. At Jorashanko, children remembered the Chamcham Basti story with almost no prompting, and got most of the details correct. At Narkeldanga, the researcher had to provide small cues (beyond the primary question), to hear the entire story. Once their memory was prompted, though, children here were able to reproduce the story with close to as much embellishment and enjoyment as their peers at Jorashanko. Games, digital and otherwise, and craft activities were also recalled with almost no prompting at Jorashanko.

The children across centers were in peer groups, lived in close-packed urban slums, and went to similar profiles of schools. What, then, could be the reasons for this difference in retention and recall of knowledge?

1. STIMULATION IN THE ENVIRONMENT

As mentioned earlier in this report, while the Jorashanko environment was economically ahead of the Narkeldanga environment, the children at Narkeldanga appeared to have more and greater sources of out-of-home stimulation than the Jorashanko children. The children at Narkeldanga usually travelled further to school, spent more hours in non-study environments, and got greater freedom and mobility than the children at Jorashanko.
The third applied to a greater extent to girl children than boy children.

i) Travel to school

The schools attended by the children at Narkeldaga in most cases demanded travel by bus, cycle or rickshaw. In contrast, the children at Jorashanko attended schools that were within a 10 minute walk, if not closer. This meant that the periods of being in the outside (i.e. neither home nor school), and being exposed to the varied stimulation offered by a metropolitan city were, on a daily basis, greater for the children at Narkeldanga.

ii) More hours of non-study environments

The average study related part of the day for the children at Narkeldanga was divided between school, tuition and some homework (most homework was done at tuition). The average study related part of the day for the children at Jorashanko was divided between school, tuition, madrasa and some homework. Accounting for other activities, this left about five clear waking hours that children at Narkeldanga had to themselves, whereas for children at Jorashanko, this was about two-three hours.

iii) Mobility/ Use of free time

Children at Narkeldanga were reportedly more often out of the home (at friend’s houses; playing in the lanes; older children playing badminton on a side-street that had less traffic; going out with older relatives or friends) than children at Jorashanko. The lack of mobility seemed truer for girls at Jorashanko than boys, but even boys did not report venturing far from the home. As mentioned earlier, this has possibly to do with the very adverse traffic and crowded conditions in and around the area, and the fears of parents.

In this difference, the daily stimulation of the children at Narkeldanga was higher than the children at Jorashanko, who tend to remain in and around the home for the most part. For this latter group, then, a space to play that was not constantly supervised by caregivers could be reasonably assumed to have held greater value, and therefore be remembered with greater vividness and less effected by the overlay of subsequent information.

2. DIFFERENCE IN MODE OF RECEIVING THE ORIGINAL INFORMATION

The structures of the manner of receiving information in the RSJM intervention were different in the cases of Jorashanko and Narkeldanga. At Jorashanko, children interacted directly and constantly with the didis and dadas of the field agency, who taught and played with them. These young people in their early twenties who were also part of this present study,
were articulate, intelligent and confident in their work. It was clear in the research that the children participating in the intervention thought of them with a combination of affection and respect tending to awe, somewhat as children might feel towards role models. The mode of learning adopted at Narkeldanga was in groups, giving children less direct and constant interaction with the didis and dadas, and more with their (the children’s) older peers—who may be assumed to have less credibility and glamour-value than didis and dadas.

The arrow diagrams below show the difference between the ‘individual’ intervention at Jorashanko, and the ‘social’ intervention at Narkeldanga. Note that the primary difference between these two forms of intervention was the additional layer of group leaders (peers) in the ‘social’ intervention at Narkeldanga.

The steps of transmission of information at Jorashanko:

- **SESAME WORKSHOP**
- **TEACHER (DIDIS AND DADAS)**
- **INDIVIDUAL CHILDREN**
The steps of transmission of information at Narkeldanga:

SESAME WORKSHOP INDIA → DIDIS AND DADAS → GROUP LEADERS (PEERS) → INDIVIDUAL CHILDREN

Thus, children at Narkeldanga experienced less direct contact with the high-credibility didis and dadas, while also receiving information/playing games filtered through the extra step of group leaders. It is possible that information was lost, or misinterpreted in the additional step of group leaders, thus rendering the original experience of the RSJM intervention somewhat less vivid in the minds of these children, than that of their peers at Jorashanko.

12. Media Exposure

The meaningful media environment for the children interviewed in this study is divided across school and other learning (madrasa and tuition workbooks at Jorashanko, and tuition workbooks at Narkeldanga) books, cartoons and games. The term ‘meaningful’ is used because while the children across centers are surrounded by media (advertising, posters, and all kinds of programming on television), books of study, cartoons and games were the only types of media they reported having regular and intensive contact with.

SCHOOL BOOKS

School books seem to be the largest part of the connection with non-instrumental reading (instrumental reading being currency or calendars) in these children’s lives, and almost the only source of writing. It was noted through home visits and questions that there were very few books other than school, tuition and madrasa books (see the two categories below) belonging to children in the families interviewed for the study.

School books have cartoon-like pictures (for younger classes), and photographs (for older classes). While much of the quality of the drawing and colo-renning of the cartoons for younger children is reasonably attractive in terms of line and colour, the text is quite flat and pedantic,
consisting primarily of declaimers. In the case of text written in English, these books seem somewhat above the reading competency level of the children for whom it is intended. The latter two features are also true of older children’s textbooks.

Only the youngest children have opportunities to draw or colour in these textbooks, or write in them apart from in the most restrictive ways (set blank areas to answer set questions). Going by the textbooks viewed across children in this study (approximately 100 books, children above the age of five years are not supposed to draw, colour or express any other kind of creativity in schoolbooks but they make up for this by drawing in the margins.

With these school books being the regular contact with learning media, it should be no surprise that the materials given by GGSS were appreciated by their audience. Although children were aware that the lessons were the most important thing about the intervention/‘programme’, they referred to the materials as ‘cartoon(s)’. This is revealing, as it perceptually places the learning materials of RSJM away from books of study, into an altogether more interesting and exciting area away from the children’s regular experience.

**TUITION BOOKS**
These are mostly workbooks with exercises to be completed. Pictures that offset text are low-resolution, blurred black-and-white or full colour. Paper is thinner than that of school books. These are considered necessary evils, neither liked nor disliked.

**MADRASA BOOKS** (at Jorashanko)
The types of books used in madrasa teaching include prayer books, books of (morality) stories and books of the Urdu alphabet and numbers. Prayer and morality-story books are usually black and white, and printed on matte low quality paper, while alphabet and number books are luridly colored and poorly printed on glossy paper.

**NON-VIDEO GAMES**
Carrom and Ludo are the favourite non-video games played by children. Ludo takes very little
space, so it can be played at home, and younger children in particular like it very much. Carrom is the game of choice, but owning/ playing regularly on a carrom board remains an aspiration for many of these children because boards are expensive, and take up some space—both at a premium in these environments. When carrom is played at home or in the near neighbourhood, older children such as teenagers, and adults tend to turf out children from games.

**DIGITAL GAMES**

The digital games of choice are Subway Surfer, Temple Run 1 and 2, car and bike driving games, and other chase games. Both boys and girls play these games across centers, and some older girls also reported playing Candy Crush while boys also played football as a video game. Games are played either at home, or at a neighbor/ relative’s home, and on a TV screen with a ‘remote’, which is a sort of joystick. Access to phones with games is also provided via the father’s, older sibling’s or mother’s phones, but in these cases, the child has to play the games loaded on the phone, which may or may not be her/his preference. It is to be noted that the games most often mentioned in this research were chase and/or other high-excitement games. In fact, the adrenalin boost that comes from high-speed games seems to be the most desirable outcome of playing them. Also to be noted is that the mode of playing games would imply a preference for a pressing downward motion in order to make things happen on the screen.

**CARTOONS**

Doremon emerged the favorite across centers. The most common reasons given for this were ‘gadgets’, and how Doremon helps others, particularly his friend Nobita.

*Chota Bheem* and Ninja Hathori were also liked a great deal, because among other reasons the characters in these cartoons helped others. Being able to, and actually helping others, particularly those less strong than themselves seems to be a quality regarded highly by the children interviewed in this study—if one is to go by their pattern of preference in cartoon watching. Perhaps
this preference can be taken seriously, because the aspect of wanting/liking to help others was a large part of the children’s pass-it-on response to the lessons of the RSJM intervention.

In the varied way of children, they also reported liking the Tom and Jerry kind of violence, and the straight forward simplistic humor of Motu-Patlu.

About 85 per cent of the children interviewed reported regularly watching Galli Galli Sim Sim, but usually at night, since the timing of the morning show is not convenient for those going to school.
13. Main Findings
The main findings from this study are that children recalled and seem to be putting into practice the three main learnings from the intervention.

Additionally, children remember stories, characters and anecdotes from their participation in the program a year ago, and both mothers and children would like to see the program return to their localities. The bags and books given to children by the program a year ago are regarded as favored possessions, and those that were lost or given away by mothers are missed by the children who lost them. Given the positive reaction to the program from both children and caregivers, it would overall be safe to claim that the RSJM program has been a success.

14. Recommendations
The principal recommendation emerging from this study is that the intervention was effective across several dimensions, and should be repeated in urban slum areas in as many places as possible. It has evidently provided learnings about hygiene, and by extension health, that have survived across time; aided in the empowerment of children within their communities, and, indirectly helped over-stretched caregivers by supporting a cause to which caregivers would otherwise have to continue to devote time and energy.

One area that may be looked at in iterations of the intervention is that of the games and other activities used by dadas and didis to keep children involved in the lessons. These young field partners seem to have played a variety of games with the children—snake game, under the table/ bench and call-and response games seem to have been particular favorites. It may be helpful to document these games, and structure them into the training for future interventions, incorporating the learnings from this one. This would generate a list of potential strategies to be used in case children get distracted, tired of sitting, or are in any other way unable to concentrate on the task at hand.

The possible factors for differential recall of detail across centers have been discussed earlier in this report, and it emerges that the children at Jorashanko have clearer and higher-detailed memories of the intervention than the children at Narkeldanga. This being the case,
it may be a good idea to replicate the Jorashanko model of learning in future iterations of the intervention, as direct contact with ‘teachers’/ facilitators, who became ‘friends’ with the children, and known to the community at large, seems to have helped retention over time.

The strong preference for, and delight in the digital game ‘Karo Kitanu Gayab’ indicates a preference for simple games with a tapping/ downward stroke motion of the hand. This may be because tapping is easier than swiping the screen, or dragging across it when a child is excited—excitement being the normative reaction to digital games in these environments. Therefore, it may be a good idea to work on developing more tap motion related games, or, alternately, working on exercises and routines that can slow children down somewhat and sharpen their focus.

While it is possible that there are other causes for this distinct preference, including factors of exposure, what emerged clearly from the observation is that children find it easier to tap on a digital surface than to slide their fingers over it, keeping the friction between surfaces enough to play competently. The other three games, that require a sliding motion, visually appeared to be more difficult for children to play.

Lastly, it would be a good idea to adapt this model to teach other things that children in urban slum environments need to know. First aid or other basic emergency information would be possibilities, but teaching basic English and Math through games and stories would also be considered extremely helpful in the community, as, like health, these are perceived to be routes to a better future.
Appendix 1

1. FGD Caregivers

PART A: INTRODUCTION
1. Introduction of the purpose of research
2. Introduction of researcher
3. Introduction of caregivers (name, age, education, relationship with children under care, forms of caregiving, child’s media)

PART B: FREE RECALL
Do you remember the programs your child attended here with these dadas and didis some time ago? Can you tell me a little bit about what you remember of these programs?
1. Around when did these programs take place? Where?
2. Were you also present at the programs, or did you hear about them from the child in your care?
   a. If attended/ participated, what kinds of events/ kinds of programs/ games do you remember?
      i. Did you play any of the games? What did you think of it? Did you learn anything from it?
   b. If report from child, what kinds of things did they tell you about the programs?
      i. Did you see the things the child brought home?
      ii. What do you remember of those things?
      iii. How long after the program were these things around the house?
3. How did the child use these things in the house? Did he/she play with them with others? If so, who and why?

PART C: SOCIAL LEARNING
4. What did you think about the games and stories?
   a. Stories: What stories did you hear from the child that they had seen/heard in the programs? Did you feel these were interesting stories? Why?
      i. Did you think there were some things it was difficult for the child to understand or deal with? If yes, why, if not, why not?
   b. Games (Digital and non-digital separately): What games did you hear about/ see? Did
you feel these were interesting games? Why?
   i. Did you think these games made some things too difficult for the child? (understanding, manual dexterity) If so why, if not, why not?
   c. Did you play any of the games?
5. How did you feel about the child hearing the stories/ playing the games?
   a. Was the child’s attention effectively occupied while they were listening/ colouring/ playing?
      i. If so, why do you think the stories/ games held his/ her attention?
6. Nowadays it seems that children learn from everywhere.
   a. What kinds of places/ things do you see children learning from nowadays?
      i. What sorts of ideas do they learn? Does this sort of learning help them? How?
      ii. Do you sometimes help them to learn properly the ideas they pick up from these other sources? How?
7. Did you feel they learnt something from the programs we have been discussing earlier? What did they learn? Is knowing this likely to help them?
   i. How is it likely to help them? For how long is it likely to help them?

PART D: BEHAVIOUR
1. Where does the child go to the bathroom? Location, distance.
   a. Do you go with the child? Day/ night
   b. Does the bathroom have water? Light? Mug?
   c. Soap or carry?
2. Do you have to remind the child to do anything or carry anything before they leave for the bathroom? How often?
   a. Do you have to remind them more or less often now, than about a year ago? What about two years ago?
   b. Growing up > change of many kinds. Do you think the change in bathroom behavior is due to the child growing up?
   c. Do you think there are any other reasons for this change? What are these reasons?
3. Discuss reasons for and kinds of bathroom behavior change in children with reference to learnings from games and stories.

Thank you.
2. FGD Children

PART A: INTRODUCTIONS
4. Introduction of the purpose of research
5. Introduction of researcher
6. Introduction of children (name, age, school [y/n] + class, favorite activities

PART B: FREE RECALL
Some time ago, you heard some stories and played some games with the didis and dadas here. I would like to know what you thought of those stories and games, and if you enjoyed them or not.

1. What do you remember of those (a) stories (b) games
   a. What stories do you remember?
   b. What games do you remember?
   c. After all, we do not remember everything we see and hear. Why do you think you remember these (a) stories (b) games?
   d. What did you like about these (a) stories and (b) games?
   e. What did you not like so much about these (a) stories and (b) games?
2. Do you remember where you (a) heard these stories and (b) played these games? Describe these places
3. Do you remember when (chronology) you (a) heard these stories and (b) played these games?
4. Now let us look at these stories and games in a little more detail
   a. What do you remember of the characters in these (a) stories and (b) games?
      i. Looks
      ii. Functions
      iii. Impressions
      iv. Straight recall + overlay
   b. What do you remember of the things that happened (events) in these (a) stories and (b) games?
      i. Go down list of characters that have already been named
   c. All these characters did certain things in the (a) stories and (b) games.
      i. For each story already mentioned by children, check recall of sequence of actions
      ii. Elements of sequence
      iii. Order of sequence.
PART C: RECOGNITION
1. What is this? (cover of storyboard)
2. What happens in it?
   Who is in it?
   What do they do? (individual roles)
   Do you like this? Why?
   Are there things you don’t like? Why?
   Are there things that are not true? What things? Why do you think they are not true?
3. What is this? (Digital game 1, 2, 3, 4, start position)
   a. What do you do with this?
   b. Show me
   c. Is this fun to do? Why?
   d. We always learn something from things we look at and do in our lives. What did you learn from this?
4. What is this? (Tippy-tap) (show closed, go through quadrants seeing accuracy and reasoning of recognition recall)
   a. Do you like this? Why?
   b. If not, why not?
5. Floor game, as above.

PART D: BEHAVIOUR AND ATTITUDE
1. Where do you go to the bathroom?
2. Is there water in your bathroom? How often do you (have to) take water?
3. Is there soap in your bathroom that you can use? How often do you (have to) take soap with you?
4. Is there a chappal you can wear? How about others in your family?
5. Have you always done these things? If not, when did you start doing them regularly?
   a. Did anything happen that made you start to do this?
6. What did you learn from the stories and games we have been talking about?
   a. About going to the bathroom (feeling about)
   b. About water (feeling about)
   c. About soap (feeling about)
   d. About chappals (feeling about)

Thank you.
3. Home Visit Guide

AIM
To observe and understand the child’s learning and behavioral environment at home, specially with regard to hygiene

METHODS
1. Home context observation
2. Interviews with caregivers in context
3. Observation of media exposure and environment

AREAS OF INQUIRY
1. Routine of child
   a. History of child’s bathroom behavior
2. Any change after attending Sesame pilot last year?
   a. Sustainability/ non-sustainability of change
3. Routes and contexts of learning behavior at home
4. Child’s studies
   a. Interest in
   b. Practices
   c. Performance
5. Child’s media preferences/ times/ routines
   a. Understanding of child’s media learnings
6. Detail on Sesame material use at home
   a. Companionship
   b. Reactions
   c. Specific learnings
7. Intergenerational differences in bathroom use
   a. New learnings entering the home space
8. Caregiver’s understanding of role and importance of Sesame material for child
   a. Stories
   b. Games (tippy tap, floor game)
   c. Digital games (1, 2, 3, 4)
   d. Role of soapy strip
   e. Any suggestions about the material
4. IDI Opinion Leader Kids

PART A: INTRODUCTION
1. Intro of purpose and researcher
2. Intro of participants (name, age, school+class, favorite subject, favorite activities, daily schedule, holidays, media)

PART B: FREE RECALL
Some time ago, you heard some stories and played some games with the didis and dadas here. I would like to know what you thought of those stories and games, and if you enjoyed them or not.

5. What do you remember of those (a) stories (b) games?
   a. What stories do you remember?
   b. What games do you remember?
   c. After all, we do not remember everything we see and hear. Why do you think you remember these (a) stories (b) games?
   d. What did you like about these (a) stories and (b) games?
   e. What did you not like so much about these (a) stories and (b) games?

6. Do you remember where you (a) heard these stories and (b) played these games?
   Describe these places.

7. Do you remember when (chronology) you (a) heard these stories and (b) played these games?

8. Now let us look at these stories and games in a little more detail
   a. What do you remember of the characters in these (a) stories and (b) games?
      i. Looks
      ii. Functions
      iii. Impressions
      iv. Straight recall + overlay
   b. What do you remember of the things that happened (events) in these (a) stories and (b) games?
      i. Go down list of characters that have already been named.
   c. All these characters did certain things in the (a) stories and (b) games.
      i. For each story already mentioned by children, check recall of sequence of actions
      ii. Elements of sequence
      iii. Order of sequence
PART C: OPINION LEADERSHIP

1. I wanted to talk to you because I heard that you liked the games and stories very much. Did you?
   a. How did you feel when you first saw them?
   b. You saw these stories a few times over the time they were here. Did your initial impression of story/game change over time?
      i. Why or why not?
   c. What did you learn from these stories and games?
      i. Did you feel these things were properly taught to everyone through the games and stories? Did some not fully understand? Why or why not?
   d. Did you feel these things are important for everyone to learn?
      i. Why or why not?

2. Did you try to help other people learn these things?
   a. Who? Why those people?
   b. How did you try to teach them? (tactics)
   c. Do you think they learned from you? How do you know that? (concept/action)
   d. Do you think they still remember what you taught them? If yes how do you know, if no, how do you know

3. When you tried to tell people about these things, did they sometimes say that they did not want to learn? Did they say why? Had these people attended the program here?
   a. Did you overcome their refusal?

PART D: BEHAVIOUR

7. Where do you go to the bathroom?
8. Is there water in your bathroom? How often do you (have to) take water?
9. Is there soap in your bathroom that you can use? How often do you (have to) take soap with you?
10. Is there a chappal you can wear? How about others in your family?
11. Have you always done these things? If not, when did you start doing them regularly?
   a. What made you start to do this?
12. Do you help others go to the bathroom?
   a. Who? How do you help them?
   b. How long have you been doing this or how long ago were you doing this?
   c. Do you do this by yourself, or did someone ask you to do it?
13. Do you think clean bathroom habits help you in other areas of your life? Why or why not?
Do you think what you say is true for everyone? Why or why not.

Thank you.

5. PRA Kids

AIM
To develop a social map of bathroom use and practice

Participants will be provided A3 paper, colored pens, pencils and crayons. They will be asked to make a detailed map of their immediate area (roads, shops, any important points for the child). This map will focus on:

1. Bathroom locations
   a. Light/ windows, door, potty in bathrooms
2. Locations of sources of water
3. Locations of soap
4. Locations of chappals
5. Locations of towel or any other way to dry hands
6. Normal locations of any people that help/ hinder bathroom use
7. Any privacy problem-areas
8. The route to the bathroom in the morning
   a. Over the course of the day
   b. At night
9. Locations of light for bathroom use (at night)
   a. Any change in water, soap, chappal locations at night
10. Depiction of regular path walked to the bathroom
    a. Depiction of path back
11. Depiction of any disruptions on this path

6. Caregiver PRA

AIM
To develop a social map of bathroom use and practice from the caregiver point of view

Participants will be provided A3 paper, colored pens, pencils and crayons. They will be asked to make a detailed map of their immediate area (roads, shops, any important points for the community). Note that while the PRA with children focuses on their own experiences, this one is
intended to map both caregiver experiences, and their understanding of the child’s experience.

This map will focus on:

1. Bathroom locations
   a. Light/ windows, door, potty in bathrooms
2. Locations of sources of water
3. Locations of soap
4. Locations of chappals
5. Locations of towel or any other way to dry hands
6. Normal locations of any people that help/ hinder bathroom use
7. Any privacy problem-areas
8. The route to the bathroom in the morning
   a. Over the course of the day
   b. At night
9. Locations of light for bathroom use (at night)
   a. Any change in water, soap, chappal locations at night
10. Depiction of regular path walked to the bathroom
    a. Depiction of path back
11. Depiction of any possible disruptions on this path
Appendix 2: PRAs

Note the locations, importance in terms of size, and relative distance between points of regular usage: Home, school, tuition, madrasa (at Jorashanko), local shops, friends and significant relatives. Also note the objects portrayed in the bathroom, and objects that are present for hygiene use at home.
Note only toilet just by the house, and toilet with bathing 2 mins away.

Sahil Pakray, age 10

Note that this toilet has only an Indian-style toilet bowl and a window.

Shop (Mamu’s)


ix. Siblings and close friends were allowed only if they had participated in the original intervention.


xi. An older brother at Narkeldanga, who was a principal caregiver.


