



Water, Sanitation and Hygiene Behaviour Change Strategy

Sittwe, Rakhine, Myanmar



Save the Children

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Contents

Introduction.....	1
Community-Based Approach.....	4
Participatory Behavioural Research.....	7
Training the Research Team.....	9
Toolbox.....	10
- Participatory Rapid Appraisal Tools.....	10
- Service Design Tools.....	14
- Behavioural Mapping.....	17
- Psychology Game.....	19
Applied Behavioural Analysis.....	21
Designing Behavioural Interventions.....	25
Testing.....	28
Aligning Programme Components.....	31
Further Resources.....	33



Introduction

HOW TO USE THIS DOCUMENT

This document is meant to be a guide to the tools and methods that are used in participatory behavioural research and design. It is not a complete list of every technique that exists, but a selection of what is available with examples of how the techniques can be applied in the WASH sector. SCI staff and communities are invited to modify and develop their own techniques to suit their needs based on what is presented here.

Tools shown in the [Toolbox](#) are not meant to be used in the order in which they are presented. It is expected that SCI staff and community members will pick and choose the tools and methods that they find most useful for their context. In the spirit of a community-based approach (described in the next section), the aim of this document is to offer a range of information to SCI staff and communities rather than prescribe a specific course of action. Given the diverse communities and contexts that are currently being served by SCI, it is impossible to use a blanket methodology for behaviour change and obtain meaningful results. It is therefore up to SCI staff and communities to draw upon their rich knowledge of the context and deploy tools appropriately.

CONTEXT

A protracted crisis is unfolding in Rakhine: thousands of IDPs living in camps have been dependent upon NGOs for over 3 years, while conditions in host villages are only marginally better. NGO actors have focused on emergency relief, responding on an as needed basis to shortages and new emergencies. To date, there has been little allocation of resources towards the construction of long-term economic, social, institutional and environmental infrastructure that would give people the capacity to make meaningful changes to their lives.

In this context where communities have little agency, behaviour change interventions can be a serious ethical violation if they are imposed on an unwitting population. Behaviour change is by nature deeply personal, and can be nothing short of manipulation if it is not understood or consciously chosen by the population who experiences it. It is therefore crucial that informed choice be at the centre of any behaviour change strategy deployed in this context.

Choice at the community level is particularly complex in this context. Because NGOs have been implementing WASH programmes in the camps for years, communities know what is expected of them and readily perform their part. They have ready-made answers, and identify problems in their community that NGOs have discussed with them in the past without necessarily understanding why certain WASH practices are considered unsafe. Because of this, participatory work needs to be carefully facilitated to ensure that communities are not reciting responses to please NGOs, and that they are choosing behaviour changes that truly matter to them.

COMMUNITY RELATIONS WITH NGOS

Community relations with NGO staff remain tense. SCI staff suggest that cultural norms make it difficult for NGOs to work with women and girls, and that community “gatekeepers” control NGO access and the kinds of activities that NGOs can do with communities. There appears to be deep mistrust on both sides, as NGO staff do not have much faith in community capacity to lead and commit to activities, while communities suspect NGOs of working for self-serving interests.

There is an ethos of mutual surveillance and monitoring that supports this continued mistrust. Community “gatekeepers” keep a close eye on NGO activities, while NGOs regularly monitor distributed WASH products through a network of volunteers and camp-based staff. Participatory planning and sharing of results for all monitoring and evaluation activities can greatly ease the community’s lack of control over their own information.

Introducing behaviour change in a climate of community mistrust of NGO activities can escalate tensions. To change a person’s behaviour is to an extent to change their thoughts, and that can easily be interpreted as a threat to their identity. Small steps must be taken towards establishing trust by showing communities that their input is valued and has an impact so that they begin to take participatory activities seriously. Prioritizing community decision-making and transparency in WASH activities is key.

CONFLICT SENSITIVITY

Tensions between Muslim and ethnic Rakhine communities are driven by stereotypes and rumours, all further exacerbated by lack of traditional means to resolve conflict and promote dialogue. Even in WASH focus groups, community responses are often of a black-and-white, right-or-wrong nature, which suggests that information tends to be easily accepted and categorized without much reflection or understanding. Building community capacity to discuss, problem-solve and test assumptions can help mitigate tensions at a grassroots level, and participatory WASH activities are a ripe opportunity for developing these skills.

Community leadership has also been pointed out as a key missing piece in mitigating conflict in Rakhine. Studies find it difficult to identify leaders within Muslim communities, especially among Muslim women. Participatory WASH activities can help build leadership skills without being necessarily seen as a threat to IDP governance structures, and help to ensure that there is community-based capacity to positively cope with conflict.

EXISTING APPROACHES

SCI has recently changed its hygiene promotion approach from one-way messaging to dialoguing through peer groups and focus group discussions, drawing upon PHAST (Participatory Hygiene and Sanitation Transformation) techniques. The public hygiene promotion team also uses a range of interactive methods such as games, campaigns, role-play and arts-based activities to talk about WASH issues. They use incentives such as social status to promote safe WASH practices by holding competitions and recognizing role model (Thant Shin) households. The team knows that emotions

and peers have an impact on behaviours and already use a participatory approach in planning community activities.

Through discussions with the team, field visits and results from the March 2016 KAP survey, it appears that communities are generally aware of the importance of safe WASH practices, but that knowledge has not led to actual changes in daily practices.

This behaviour change strategy is designed in light of the public hygiene promotion team's knowledge and ways of working. It builds on the team's skills and takes advantage of the community structures that are already in place, introducing methodologies that are not traditionally part of the hygiene promotion field to focus more on changing actual practices rather than promoting WASH education. It pushes for more trust in community capacity and deferral of decision-making to the community, moving towards increased participation in the way that activities are chosen, planned, implemented, and evaluated.

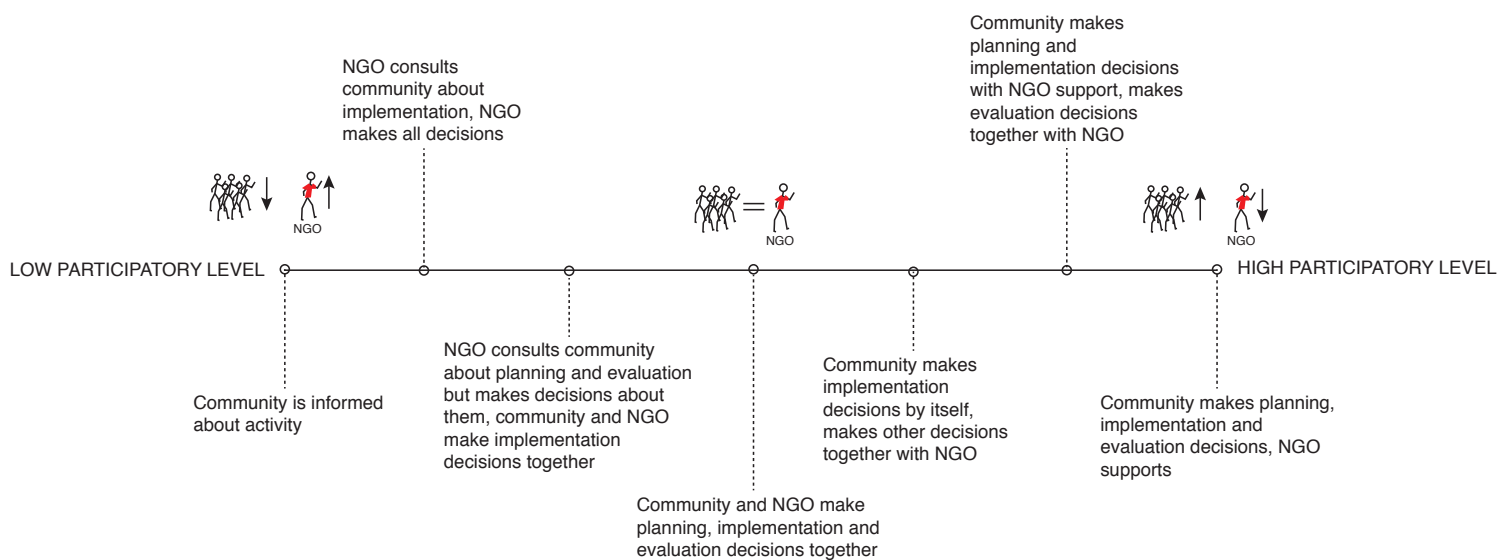
Community-Based Approach

INTRODUCTION

A community-based approach places the community at the centre of WASH interventions and offers the community control over activities. The term does get used to describe a range of participatory approaches, but we are using it here to refer to a particularly high level of participation from the community.

THE PARTICIPATORY SCALE

Participatory activities can be mapped onto a scale from lowest to highest. When measuring how participatory an activity is, we are interested in how much decision-making power the community has over the activity. While we often use the word “participation” to talk about how engaged the community is and how many people attend an activity, when we are looking at how participatory an activity is, we are actually interested in who has power over activity decisions. The diagram below shows what activities at different participatory levels could look like:



BENEFITS

A community-based approach can have many advantages when designed well and executed appropriately. Potential benefits include:

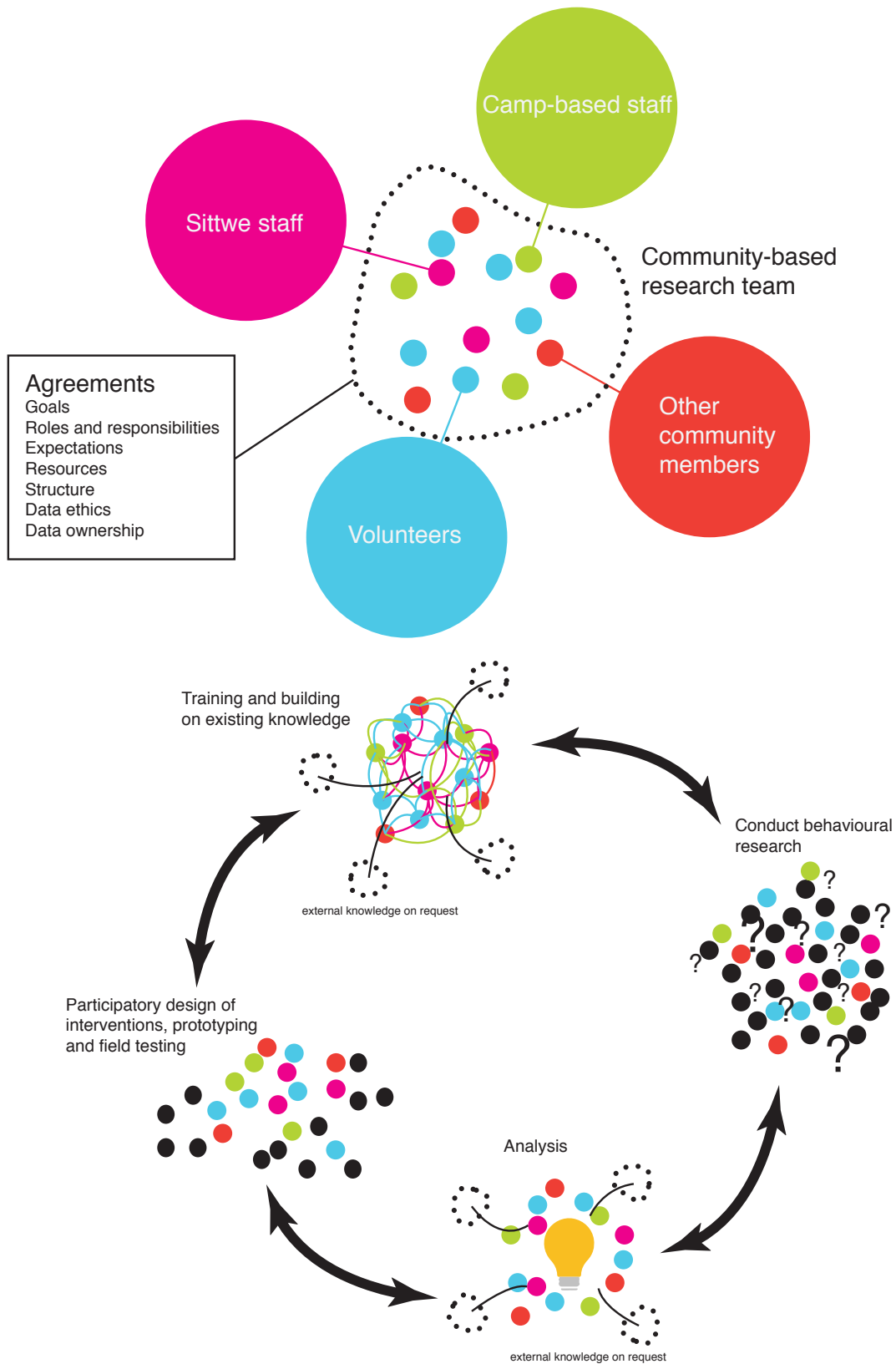
- bridging the gap between emergency relief and development, which is necessary in this context as humanitarian funding is starting to give way to more long-term development projects
- community empowerment
- strengthening local capacity through skills development
- interventions that are more responsive to the needs and priorities of beneficiaries

RISKS

At the same time, there are risks to this approach, largely from a political and governance standpoint:

- interference from local authorities
- “elite” members of the community dominating community-based structures
- community-based structures not agreeing with an NGO’s target beneficiaries
- extremely poor households having trouble contributing labour and time to activities
- efforts to build trust in the government’s ability to provide services being undermined, which in turn can decrease the government’s accountability for providing services

COMMUNITY-BASED APPROACH TO BEHAVIOUR CHANGE DESIGN



Participatory Behavioural Research

ETHICS

Treating communities as research subjects is an ethical challenge, particularly since most research methodologies were born in the service of domination and surveillance strategies. Participatory research has emerged as a way for communities to reclaim research and ensure that their interests and perspectives are fairly represented. As much as research attempts to be neutral and objective, it is inevitably tainted by the interests and experience of the researcher who has to make choices about the research question, the tools used, the data that is gathered, who has access to the data, and who profits from the research. Human research can become exploitative if the needs and views of those affected are ignored, creating an experience that is dehumanizing, invasive, and damaging.

Participatory research evolved as a way to empower communities by giving them a voice in the decision-making process. Members can decide upon the intensity of their collaboration with external researchers, and are included throughout all planning, implementation, analysis, and data presentation stages. It is the aim of participatory research to produce results that will improve the community's quality of life, so research questions are devised with social change in mind.

WASH BEHAVIOURAL RESEARCH

In the case of WASH behavioural data, participatory research is particularly useful because of the detailed and often intimate nature of the data that is being sought. Observations of defecation and personal hygiene practices are difficult to achieve without invading privacy. Understanding the chain of behaviours that lead to a desired or problematic practice entails zooming in for a detailed view of people's lives that can be uncomfortable and culturally inappropriate if done by an outsider. Participatory research enlists the knowledge and experience of community members to design research methods that are mindful of cultural acceptability and grounded in respect.

BENEFITS

Potential benefits of participatory research include:

- increased trust between the NGO and the community
- greater acceptance from the community, which leads to better access to data
- greater community ownership over WASH activities
- increased sense of community autonomy and self-efficacy
- richer understanding of the context and behavioural meanings
- cultural and internal validation of research results
- stronger communal voice in how WASH interventions are designed and implemented
- WASH activities that are informed by community perspectives
- increased community capacity to analyse and problem-solve tensions between different groups

COMMUNITY-BASED RESEARCH TEAM

Participatory research is conducted by a community-based research team. The composition of the team will vary according to what NGO staff and the community agree upon. However, the team should be as diverse as possible to ensure that research is conducted in a way that is mindful of different community experiences, e.g. female representation, representation of the elderly and of youth. Including stakeholders such as community leaders and religious leaders is important, as they can increase community acceptance of the research process and increase access to community resources.

In the context of Rakhine, stakeholders need to be carefully selected and included into the process to ensure that they do not dominate or steer the research towards their own interests. The public hygiene promotion team has found that community participation is higher when sessions are divided into groups by age and gender. Multiple community-based research teams will therefore need to be set up to ensure that there is participation from different members of the community.

DEVELOPING A RESEARCH AGREEMENT

The research agreement is a critical document for the research team. It aims to protect the community's interests and ensure that both community members and SCI staff understand what is expected through this project. The document does not need to be text-based, and can be an oral agreement or a drawing of what the team agrees upon. The research agreement should address the following:

- Purpose and duration of research: what is the goal of the research? How long should the research take?
- Understanding risks and benefits to the community: what are potential risks for the community? What are potential benefits?
- Roles and responsibilities: who will lead the team? How much time are members willing to commit?
- Research capacity: what resources will be needed? What kind of training is expected?
- Informed consent of participants and the community as a whole: what is the procedure the team will use to obtain informed consent?
- Communications: how will members of the research team communicate with each other? What are the procedures if members disagree with each other?
- Safeguarding data: how will data be stored and kept private? Who will have access to it? Who owns it? Who can use it after the project is done?
- Transparency with the community: how will findings be shared? At what points should the larger community be invited to participate?
- Termination: what happens if the research must be stopped or if the community no longer wants to participate?

Training the Research Team

TRAINERS

The type of training and the training resources needed for the project should form a part of the community-based research team's agreement. The team can request that SCI provide staff for training or have its own members conduct training sessions. It is important for the community members that are part of the research team to have a say in what kind of training they want, rather than rely upon SCI staff to make decisions.

BUILDING ON EXISTING KNOWLEDGE

Identifying what resources are available within the research team is important. Each member of the research team has valuable knowledge. Recognizing that and asking them to share their skills with the team is a key part of ensuring that all members of the research team operate as equals. Participatory research draws upon the strength of individual experiences, so it is expected that research teams in different communities will receive different kinds of training and have a different skill set. If all community-based research teams adopt the exact same methods and research plans, it is an indicator that community members are not playing an equal part in the team.

That being said, team members should be active in questioning knowledge and training that is presented to them. The initial responsibility for this may fall on SCI staff who form part of the team, but questioning should become a way for all team members to further their understanding of situations and methods. Even if it appears that the team is embracing methods that may not be adequate for the research at hand, SCI staff should use a model of questioning until the team realizes the shortcomings of its decision, rather than telling the team what to do.

TRAINING OFFERED BY THE NGO

In the case that the research team requests SCI to provide training, the following section discusses tools that are often used in behaviour change research and design. SCI staff can offer the team a brief overview of what some of the tools can do and allow the team to select which ones they think will be most useful and fit within their timeline.

SETTING REALISTIC GOALS

While the team can have ambitious goals as part of their research agreement, it needs to set up a realistic work plan by narrowing down which behaviour or behaviours it wants to work on first. There needs to be careful facilitation to identify a behaviour that is genuinely of concern for the team, not simply a behaviour that they are familiar with through hygiene promotion sessions. Moreover, it is important for the team to identify a specific behaviour that relates to WASH, not broad situations or circumstances. The team should request training in relation to the behaviour(s) they have chosen, knowing that they can request further training later on when they see a need. Right after each training session, team members should practice what was discussed and then implement so that ideas are still fresh in everyone's minds.

Toolbox

PARTICIPATORY RAPID APPRAISAL (PRA) TOOLS

Participatory Rapid Appraisal (PRA) tools allow communities to spatialize and visually articulate data. They are designed to be accessible and inclusive, relying upon drawings and graphs rather than text so that communities with low literacy levels can represent their experiences. In WASH behavioural research, we adapt PRA tools to focus more on daily habits, locations where WASH practices occur, and resources needed to perform WASH behaviours.

The following are PRA tools adapted for WASH behaviour change:

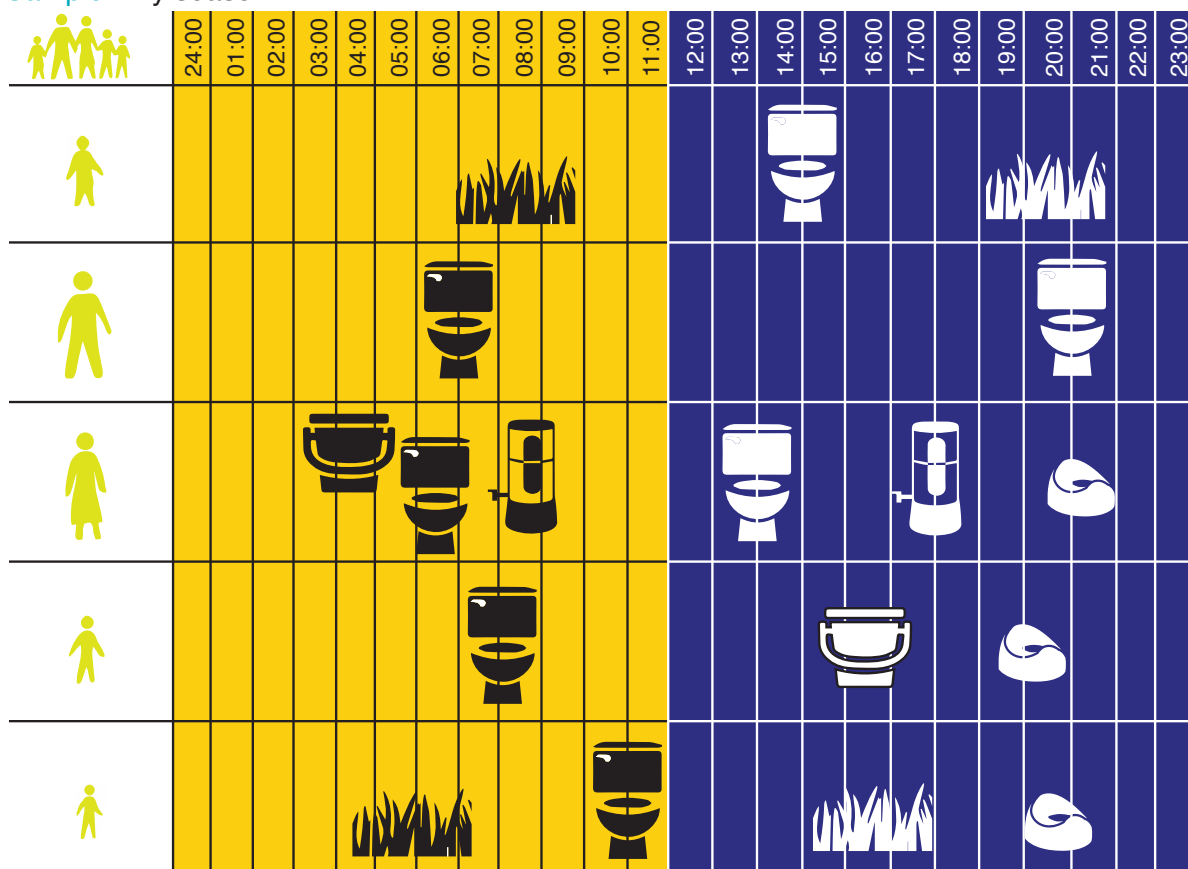
WASH TIK TAK TOOL

This tool serves as an overview of when different kinds of WASH-related practices occur in a regular day for different members of the family. Drinking water, bathing, collecting water, water filtering, different ways of defecating, etc. can be recorded by community members. Handwashing, however, should not be recorded because it is more of a reflex action and less likely to be remembered accurately. Teams should be mindful that versions of this tool will be needed for each of the seasons (dry, rainy, winter).

Sample analysis questions: how do practices change over the course of a day? What practices do you think are a problem? What practices surprise you? Why?

Sample follow-up: use a behavioural mapping tool to look at specific behaviours that are considered a problem.

Sample: Dry season



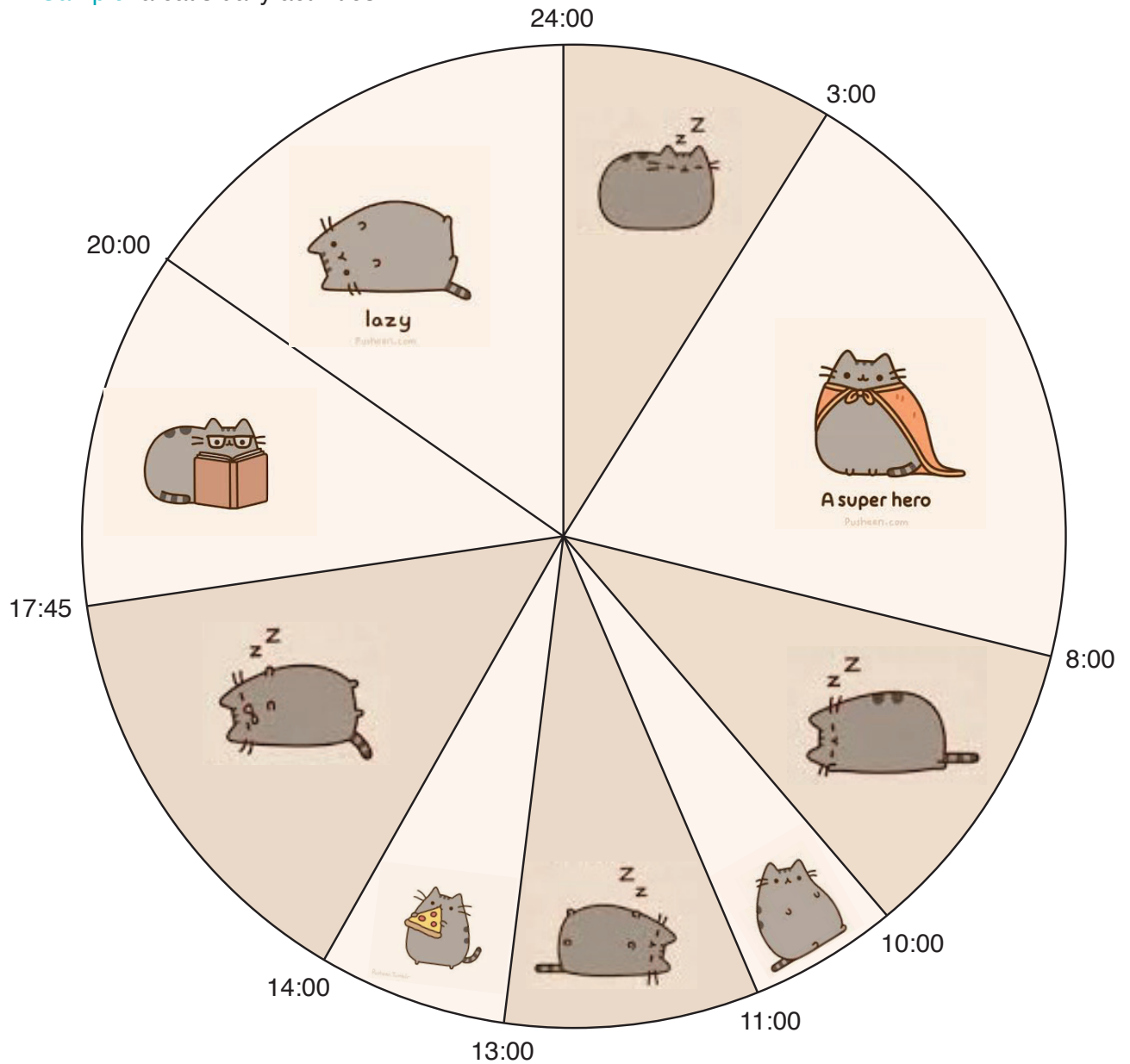
DAILY ACTIVITIES CHART

This tool is a variation of the WASH Tik Tak tool that focuses on a single person/group and captures all their daily activities, not just WASH ones.

Sample analysis questions: what times of the day are best for NGOs to host sessions? What times of the day are there activities outside of the house? What times of the day are there activities done with a group/neighbours/friends?

Sample follow-up: use a relationship map to understand how other people influence daily activities.

Sample: a cat's daily activities



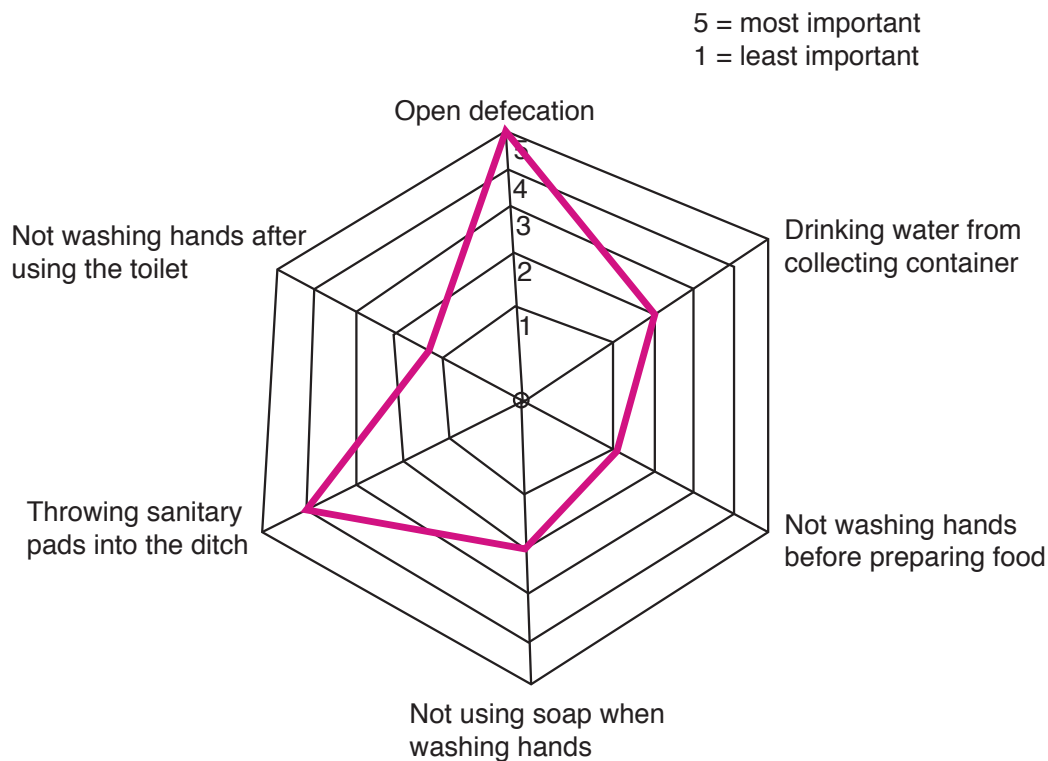
SPIDER CHART

This tool captures multiple choices in a single graph for comparison. It can be used as a quick survey tool for research team members to see which WASH behaviour they think is most troubling/most safe/most difficult to change (the question can be changed depending on what the research team wants to know).

Sample analysis questions: why did most people pick this behaviour? Is this behaviour related to a particular group (men, women, children, elderly)?

Sample follow-up: use a journey map to understand when and how this behaviour is practiced.

Sample: rate each WASH behaviour according to how important you think it is to change.



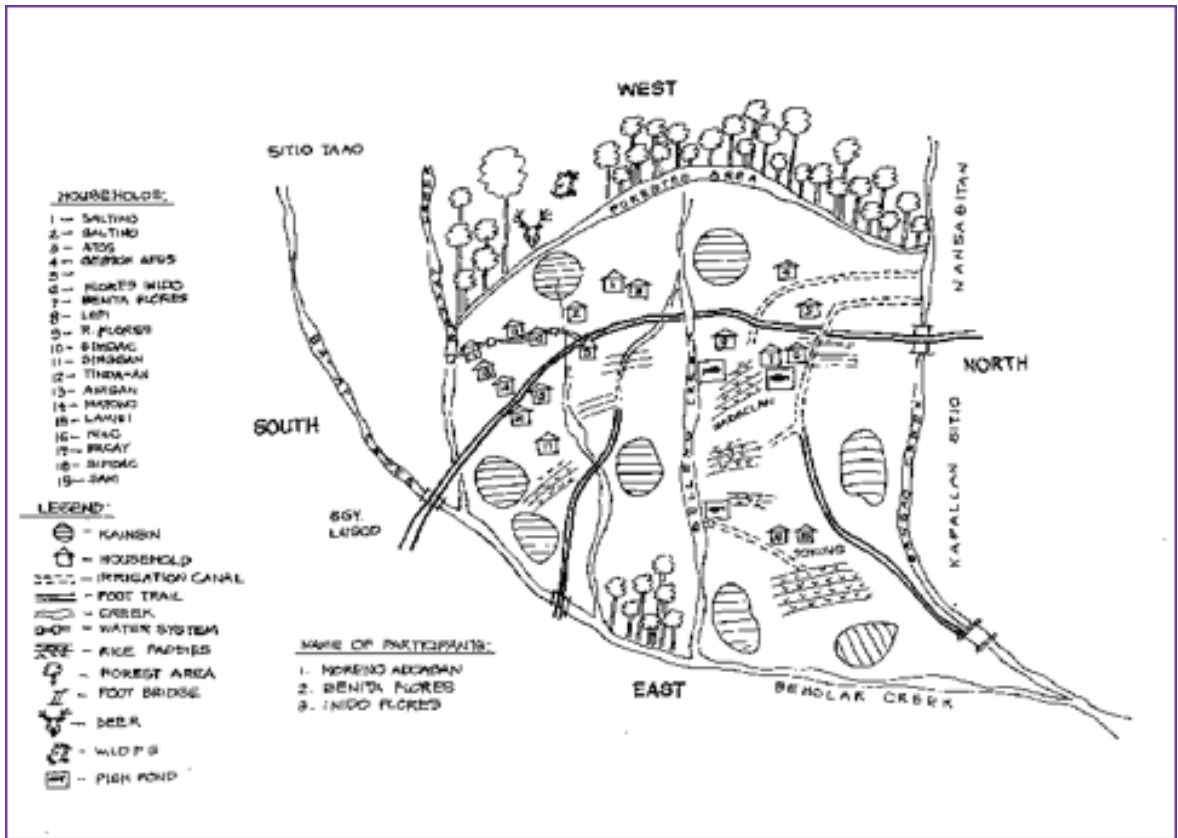
COMMUNITY MAP

This tool is a spatial map of the community as they see/understand it. It is a way to understand where WASH facilities and resources are located, and where different WASH practices happen. The team can invite more members of the community to contribute to this exercise. They can mark where open defecation happens, where hygiene materials are disposed of, where solid waste accumulates, etc.

Sample analysis questions: why are practices located in these places? What are the preferred paths people use to access different WASH facilities? Why?

Sample follow-up: using a different coloured marker, draw what changes to the map they would like to see. Select a service design tool to understand how those changes will affect different kinds of people in the community

Sample: social/resource map of Tawangan village, Benguet, Philippines, source: Integrated Approach to Participatory Development.



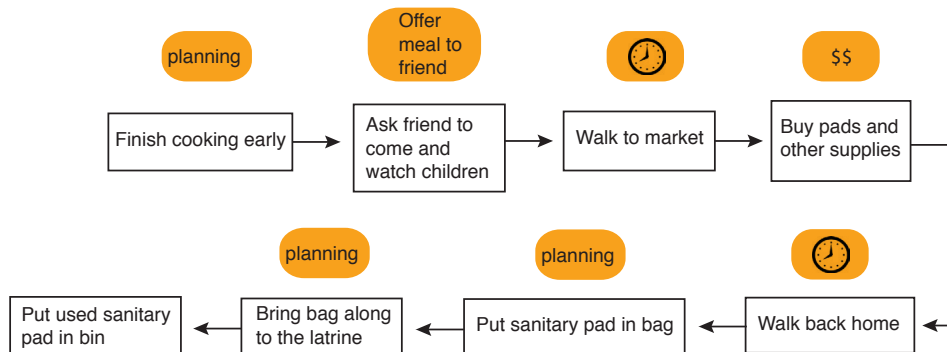
USER JOURNEY MAP

A flow chart maps out the steps and resources needed to perform a particular WASH practice. It allows the team to see all the things that are required to perform a WASH practice. Start by writing out each step on a separate piece of paper, then arrange the papers in a row. Rearrange them and add in steps as needed.

Sample analysis questions: which steps are people frequently not able to perform? What resources are frequently unavailable?

Sample follow-up: are there alternative steps and resources that people can use? Draw a new flow chart with these alternative steps and resources. What kinds of things would need to change to make these alternative steps and resources happen?

Sample: sanitary pad use



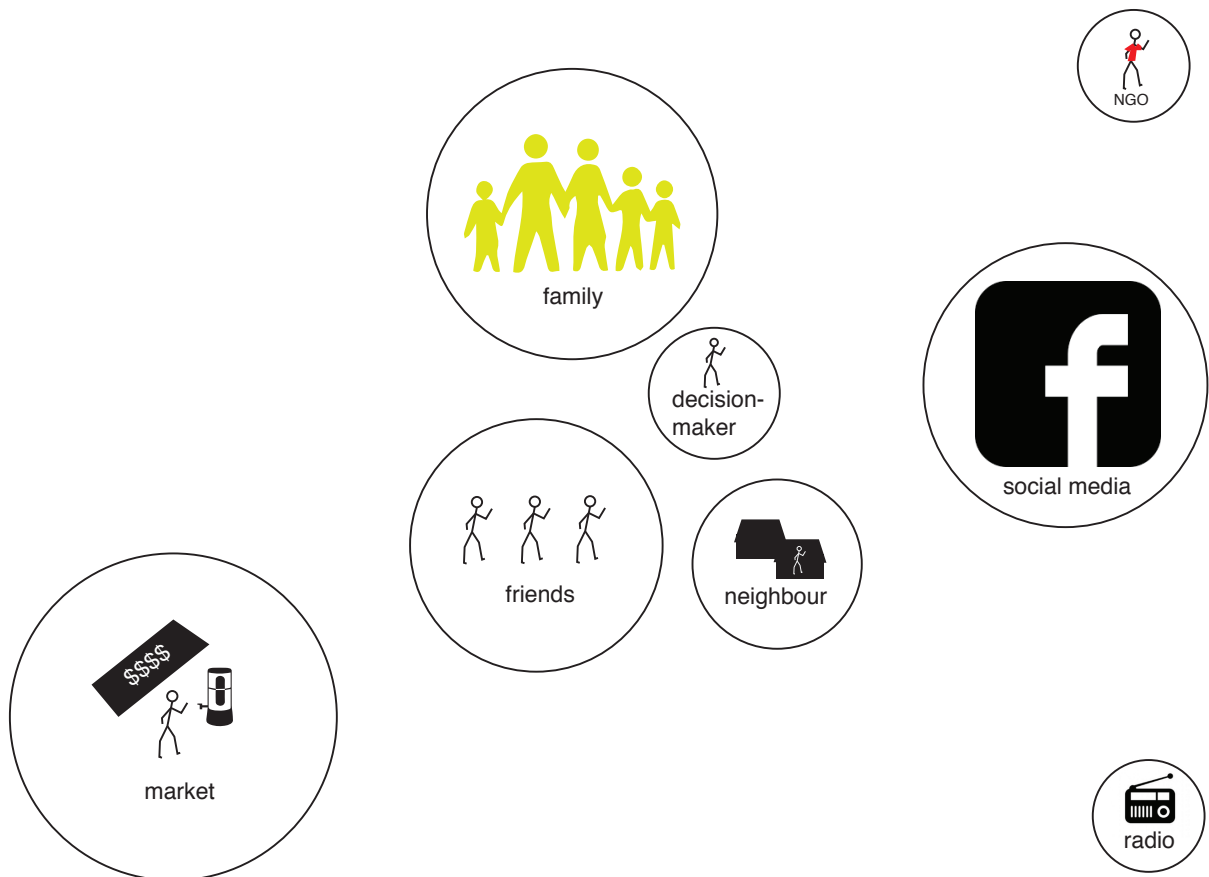
RELATIONSHIP MAPPING

A relationship map records how close a person is to each influence (shown by how close the circles are to each other), as well as how important that influence is (shown by the size of each circle). It can be used to identify people of influence within a community or influential forces upon a particular person. This is particularly useful for identifying “gatekeepers” whose buy-in is needed, and influential information sources that can be obstacles to or enablers of behavioural messaging.

Sample analysis question: what are the relationships between identified influences? Does one influence have power over another? Do some influences rely upon each other?

Sample follow-up: modify the WASH Tik Tak tool into a daily interactions clock to record when a person interacts with each of the major influences that have been identified.

Sample: map of influential information sources for new WASH products



SERVICE DESIGN TOOLS

Service design tools are ways to represent complex systems and are used in social science, business, industrial design, and technology. They focus on the user's experience of a particular service or product, and can take into account immaterial aspects such as time and movement. While they were originally developed for designers, engineers and marketing specialists to use in their creation of services and products, we use them for participatory design with communities. They allow communities to visualize possibilities and capture complex realities so that they can make problem-solving decisions and understand hypothetical impacts.

The following are service design tools adapted for WASH behaviour change:

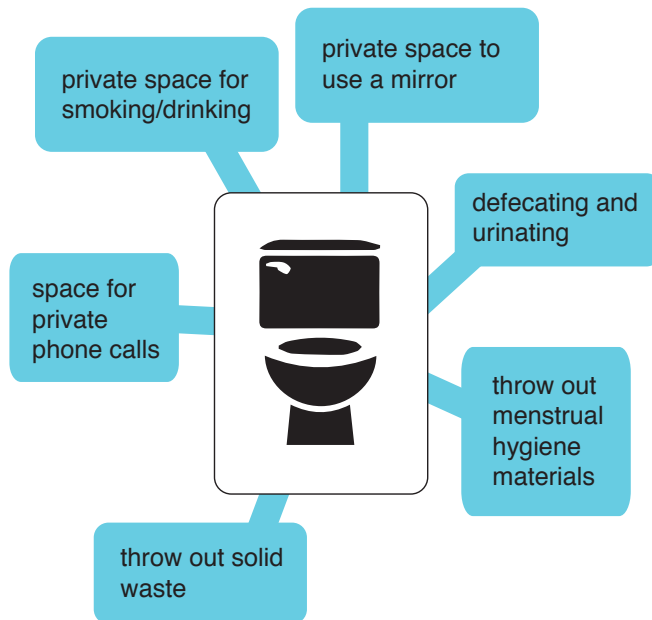
OFFERING MAP

An offering map can be for an existing WASH service/product or one that is envisioned. It allows the team to look at what different uses each service/product provides (some may be intentional while others may be unintentional).

Sample analysis questions: what other things can provide the same service as this WASH facility? What are the benefits and risks of each of these offerings?

Sample follow-up: are there ways to reduce the risk of certain offerings? Use another service design tool to test out different solutions that can reduce risk.

Sample: uses for a latrine



CONSTRUCTIVE INTERACTION

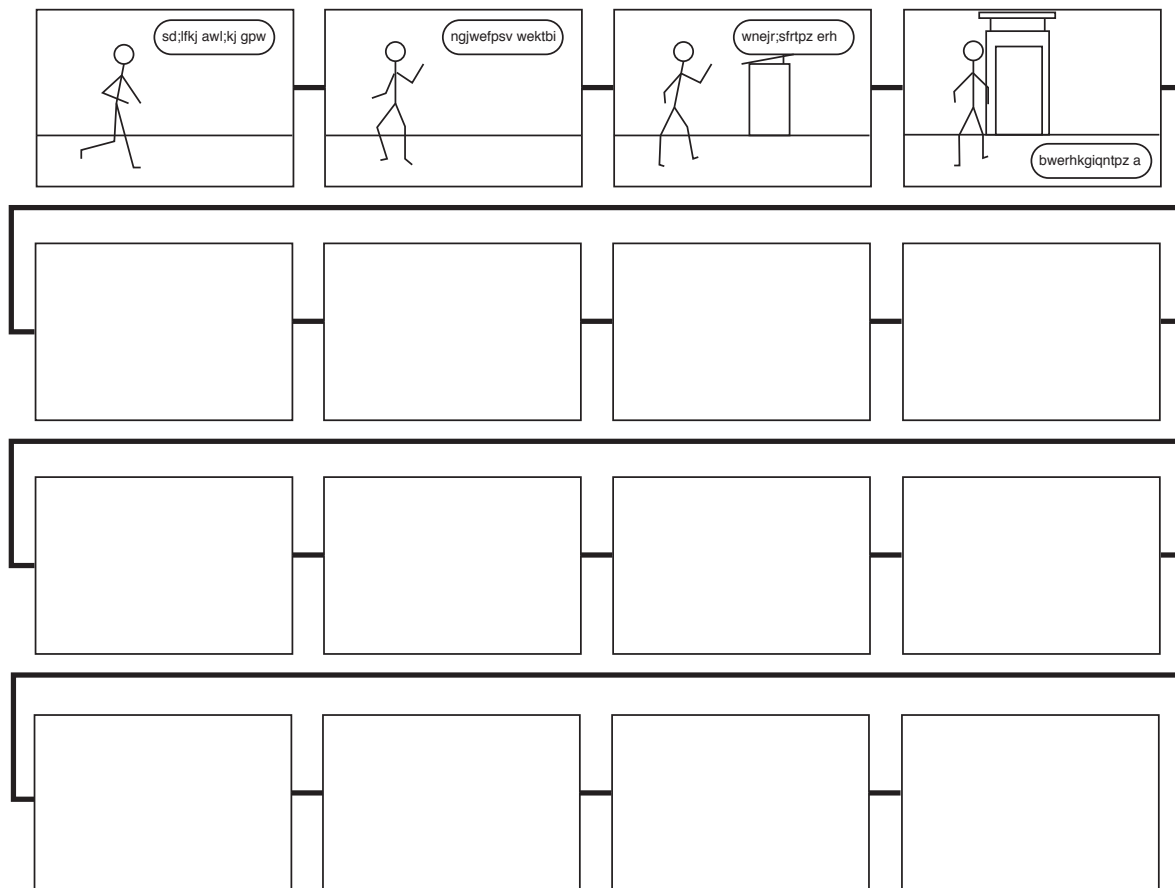
A constructive interaction is an observation of how a user interacts with a WASH service/product. The user is asked to say aloud everything he or she is thinking while using the WASH service/product, which the team then records on a storyboard. The user may need to practice thinking out loud first so that it comes naturally. As much as possible, the user should use the WASH service/product when he or she needs it as part of their normal daily routine. It should

be as “normal” as possible for the user - not a sudden change in their daily activities. Sample a number of different kinds of users and get as many users as possible to participate so that the data is more accurate.

Sample analysis questions: are there parts of the WASH service/product that most users think about when they are using it? Categorize positive and negative reactions to the WASH service/product.

Sample follow-up: modify parts of the WASH service/product that most users reacted negatively against. Repeat constructive interactions to see what users now think.

Sample: using a latrine



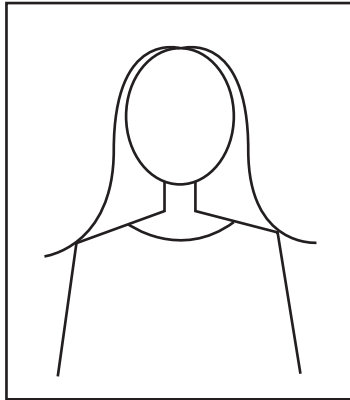
USER PROFILES

User profiles are a collection of images, text, and other materials that help the team understand how different people will react to or interact with any changes to a WASH facility, product or practice. User profiles represent categories of people rather than specific individuals and are used to let the team think through how different users experience any changes to a WASH facility, product or practice.

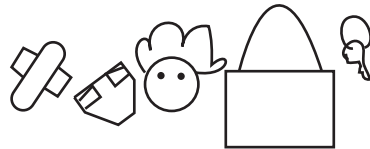
Sample analysis questions: what kinds of resources does each category of WASH user have? What needs or desires? How will a change to this WASH facility, product or practice affect these different users?

Sample follow-up: use a prototype to test out a changed WASH facility, product or practice on different kinds of users to see if they actually use it the way the team thought they would.

Sample: user profile of a young mother using a communal latrine



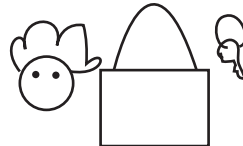
Things user takes with her to go to the latrine



Things user interacts with in using the latrine



Things user takes with her home



PROTOTYPE

A prototype is a full-scale, real-life implementation of a design. It is used to test out any improvements to an existing WASH facility, product or practice that the team thinks will encourage users to adopt safe WASH practices. A prototype is meant to be continually modified as the team learns which parts of it work and which parts do not. Once a prototype is built, other service design tools can be used to learn from it.

Sample follow-up: constructive interaction, usability testing

USABILITY TESTING










Usability testing breaks down the process of performing a WASH practice into steps and asks the user to complete a short survey immediately after he or she has completed each step. The survey has to be answered on the spot and right after the step is finished so that the experience is still fresh in the user's mind. If surveys are filled out after all the steps have been finished, we are no longer capturing the user's impressions accurately.

Different types of people (women, men, children, elderly, those with disabilities) should be part of the testing so that we can understand what parts of a WASH practice are difficult/easy, liked/disliked for people of diverse abilities and backgrounds.

Sample analysis questions: are there any steps that were problematic for all the users? Why do you think some steps were perceived as difficult/easy/disliked/liked? What can be changed to make the steps easier/more likeable?

Sample follow-up: design a solution to the steps that users found difficult/disliked, develop separate solutions for different types of users using other service design tools

Sample: latrine usage broken up into smaller steps and survey that users complete after each step

BASELINE SURVEY	SURVEY AFTER EACH STEP	
<p>Circle a number according to how much you agree or disagree with each of these statements</p> <p>1 = Strongly disagree 5 = Strongly agree</p> <p>I feel confident</p> <p>1 2 3 4 5</p> <p>I feel happy</p> <p>1 2 3 4 5</p> <p>I feel anxious</p> <p>1 2 3 4 5</p> <p>I feel capable of completing the first step of this test</p> <p>1 2 3 4 5</p> <p>I feel in control</p> <p>1 2 3 4 5</p>	<p>Circle a number according to how much you agree or disagree with each of these statements</p> <p>1 = Strongly disagree 5 = Strongly agree</p> <p>This step was very natural and easy for me to complete</p> <p>1 2 3 4 5</p> <p>This step was enjoyable for me to complete</p> <p>1 2 3 4 5</p> <p>This step required effort for me to complete</p> <p>1 2 3 4 5</p> <p>I felt capable of completing the step</p> <p>1 2 3 4 5</p> <p>I feel confident</p> <p>1 2 3 4 5</p> <p>I feel capable of completing the next step</p> <p>1 2 3 4 5</p>	<p>POUR-FLUSH LATRINE USE STEPS</p> <p> Step 0: baseline survey</p> <p> Step 1: locate latrine</p> <p> Step 2: draw water for flushing</p> <p> Step 3: carry water into latrine</p> <p> Step 4: use latrine</p> <p> Step 5: flush latrine</p> <p> Step 6: return empty bucket to water point</p> <p> Step 7: find soap/ash at water point</p> <p> Step 8: wash hands at water point</p>

BEHAVIOURAL MAPPING

Behavioural mapping is a key tool in understanding how a behaviour occurs and identifying bottlenecks to a desired behaviour using observation. It can be individual-centered or place-centered, and focuses on what happens rather than why. It is important to emphasize that behavioural mapping is not about what people THINK happens, but an actual OBSERVATION of what happens before, during and after a WASH behaviour.

The following are behavioural tools adapted for WASH:

BEHAVIOURAL CHAIN MAPPING

This is an individual-centered analysis that records in detail an individual's activities leading up to a WASH practice, the WASH practice itself and what happens after the WASH practice. This is best done through observation with consent from the individual. Certain behaviours may need to be recorded by the individual in the interests of privacy.

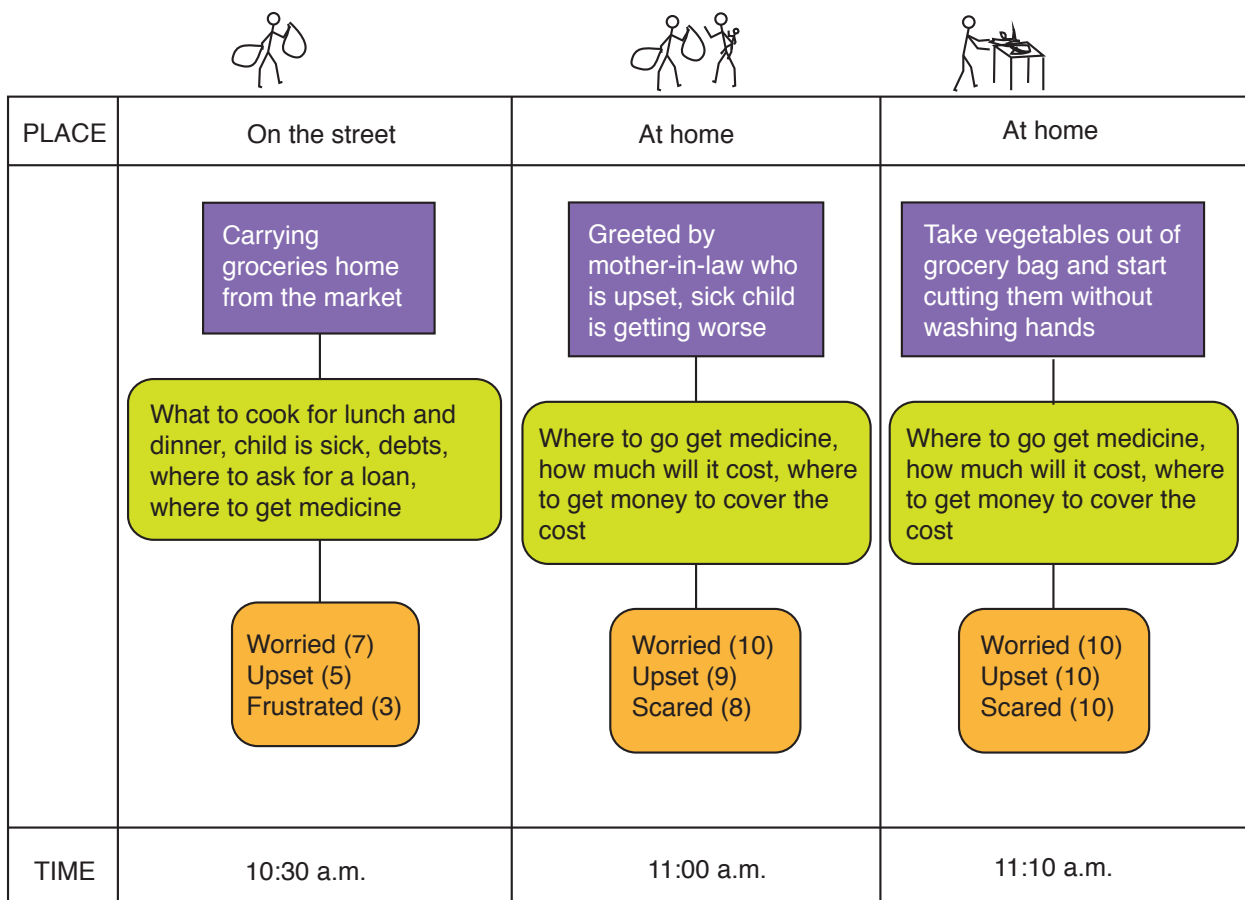
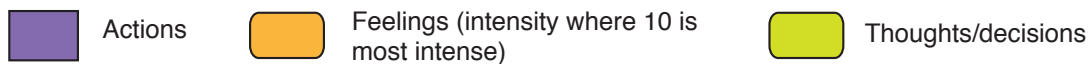
In addition to observable behaviours, it is helpful to include the thoughts and feelings of the individual. After observed behaviours are mapped out, the team should work with the individual to recall what thoughts and feelings were occurring while they were completing

each activity. This exercise should be repeated using a number of individuals of different age, gender, and ability to allow for a better understanding of the different behavioural bottlenecks that face different kinds of people.

Sample analysis questions: is there a key thought or feeling that triggered a desired/not desired action? Are there needed thoughts or decisions that are missing?

Sample follow-up: do a behaviour chain analysis of an ideal scenario where a person is performing the WASH practice as desired.

Sample: recording behaviour chain of mother's food hygiene practices (note: more behaviours should be noted after 11:10 a.m., like feeding children and cleaning up afterwards)



PLACE-CENTERED BEHAVIOURAL MAPPING

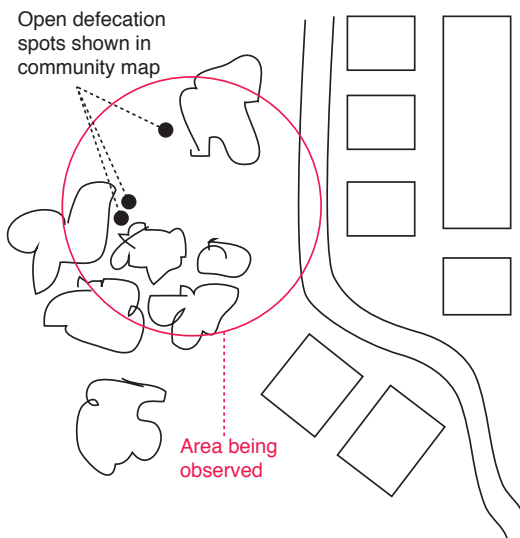
Place-centered behavioural mapping allows us to see who is using what facilities spaces, how they are using it, and at what time. It is useful to better understand particular spaces where unsafe WASH practices are occurring, as well as to see how WASH facilities are used. This is best done after a community map has been completed, showing where WASH

practices take place. Using the community map as a base, characteristics such as age, gender, time, whether it is an individual or a group, and what he or she is doing are recorded. Seasons will affect how spaces are used, so it is necessary to repeat the exercise for dry, rainy and winter seasons. It is also necessary to conduct the exercise on weekends and Fridays to compare them with weekdays, as use patterns can change drastically depending on the day of the week. The team’s knowledge of the context can help determine how many different scenarios there are that need to be captured.

Sample analysis questions: how does use of this space compare to other places in the area? Are the usage patterns different? Similar? What do you think causes these differences? Compare the results from this exercise to the results from the “Offering Map” (service design tool), if the team chose to use it.

Sample follow-up: come up with a list of factors that may be affecting the way a places is being used (think about immaterial things like sound, light, safety, distance, smell, shade, other nearby facilities). Are any of these factors changeable? Use a service design tool to test out different solutions that the team comes up with.

Sample: recording behaviours in a field where open defecation occurs on a weekday evening



Time	Alone/group	Ages	Gender	Behaviour
5:09 p.m.	Group (2)	Children	M, M	Open defecation, play
5:13 p.m.	Group (3)	Youth	M, M, M	Smoke, chat
5:15 p.m.	Alone	Adult	M	Smoke
5:55 p.m.	Group (2)	Children	F, F	Open defecation
6:02 p.m.	Alone	Child	F	Open defecation
6:35 p.m.	Group (2)	Adult	M, M	Smoke, chat
6:37 p.m.	Group (2)	Children	M, M	Open defecation
6:54 p.m.	Group (3)	Youth	M, M, M	Smoke, play with a ball
7:32 p.m.	Group (2)	Adult, child	F, F	Open defecation
7:47 p.m.	Alone	Adult	F	Throws out menstrual hygiene materials
7:58 p.m.	Group (2)	Youth	M, M	Smoke, chat

PSYCHOLOGY GAME

The psychology game is used to gather information about subconscious attitudes towards WASH facilities, products, and practices. It is based on research done by psychologists who have been studying human behaviour. The details are important, so the team should pay attention to the steps.

FLASHCARDS

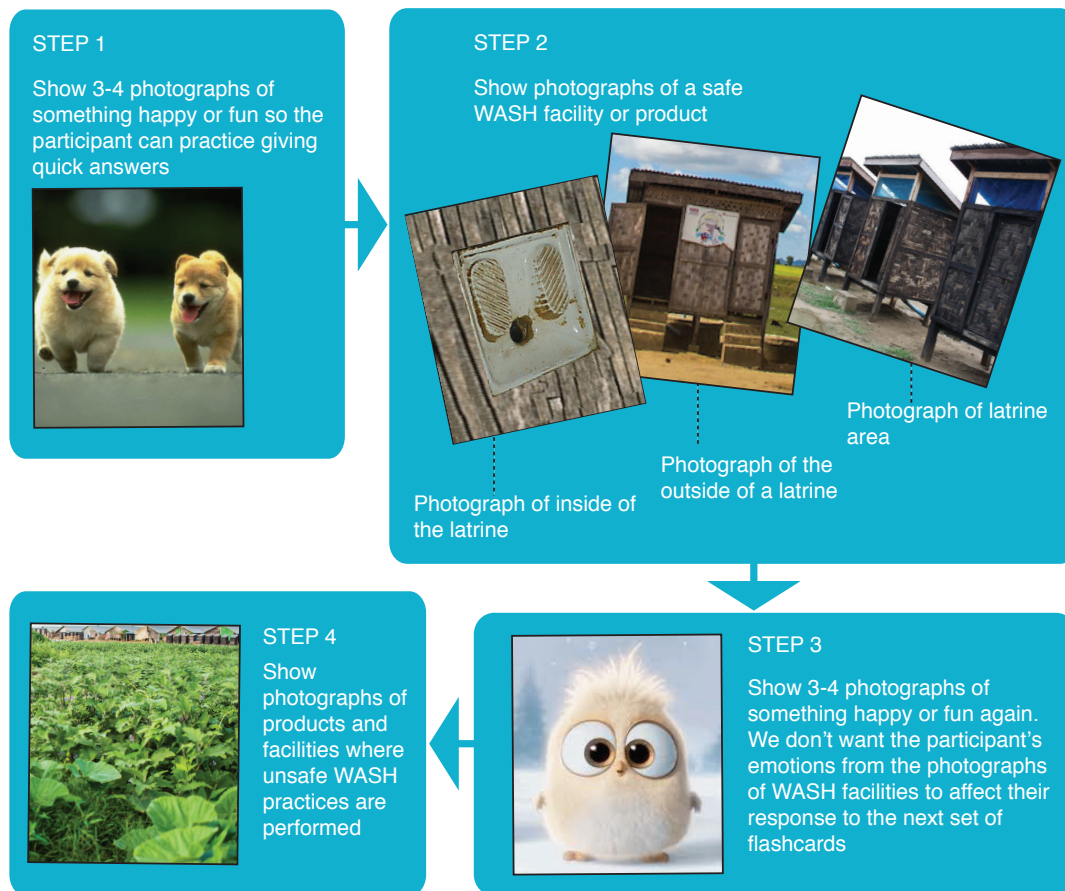
Images of WASH facilities, products and practices are shown to participants who must give as many words that come to mind when they see it within 5 seconds. The most important part of this activity is speed. Participants cannot be given time to think before speaking or else we are no longer getting information about their subconscious attitude. We want an immediate

response, an automatic reaction. A range of people should be asked to play this game so that we can see if there are differences between various demographic groups.

Sample analysis questions: sort the results according to different demographic groups. Are there any similarities or differences between how they react to the same WASH facility, product or practice?

Sample follow-up: use behavioural chain mapping to see if the thoughts and decisions that trigger or prevent an action correspond to the results from the flashcards. Are there any differences? What do you think may cause those differences?

Sample: looking at attitudes towards latrines vs. open defecation areas



USE A PHONE INSTEAD OF PRINTING OUT FLASHCARDS



Take photographs on a phone of WASH facilities, WASH products and the surrounding areas where WASH practices occur. What do people see before and after they use a WASH facility or product?



Arrange pictures on the phone in the right order and show them to participants



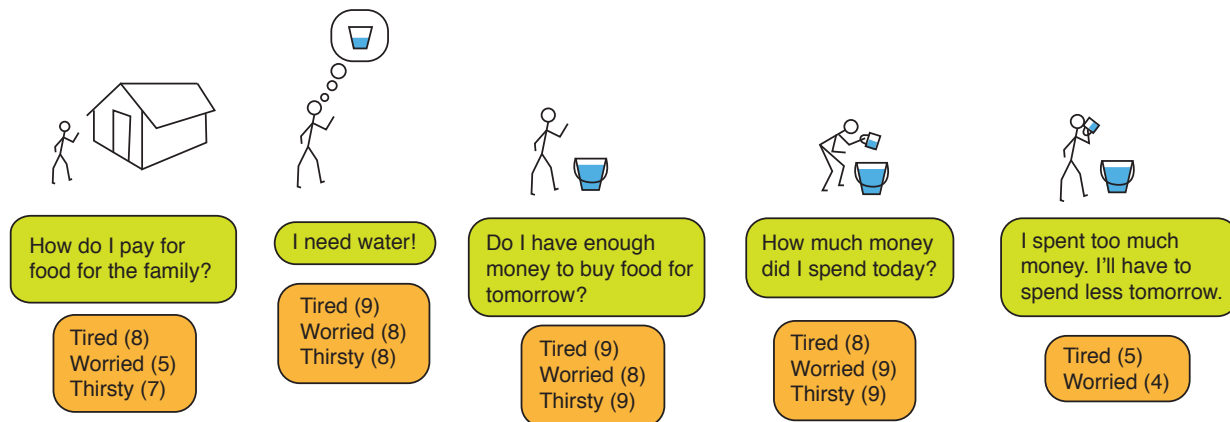
Participants have 5 seconds to look at each picture and say as many words they can think of as possible

Applied Behavioural Analysis

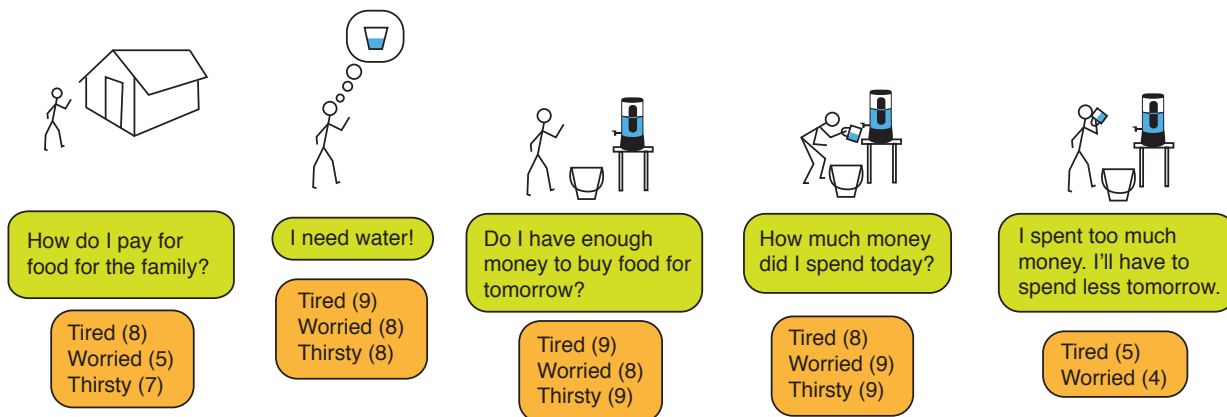
MATERIALS WE NEED

The team needs to have completed [behavioural chain mapping](#) (see [Behavioural Mapping](#)) for both actual people and ideal scenarios in order to perform this kind of analysis.

HOW PERSON BEHAVES NOW



HOW WE WANT PERSON TO BEHAVE

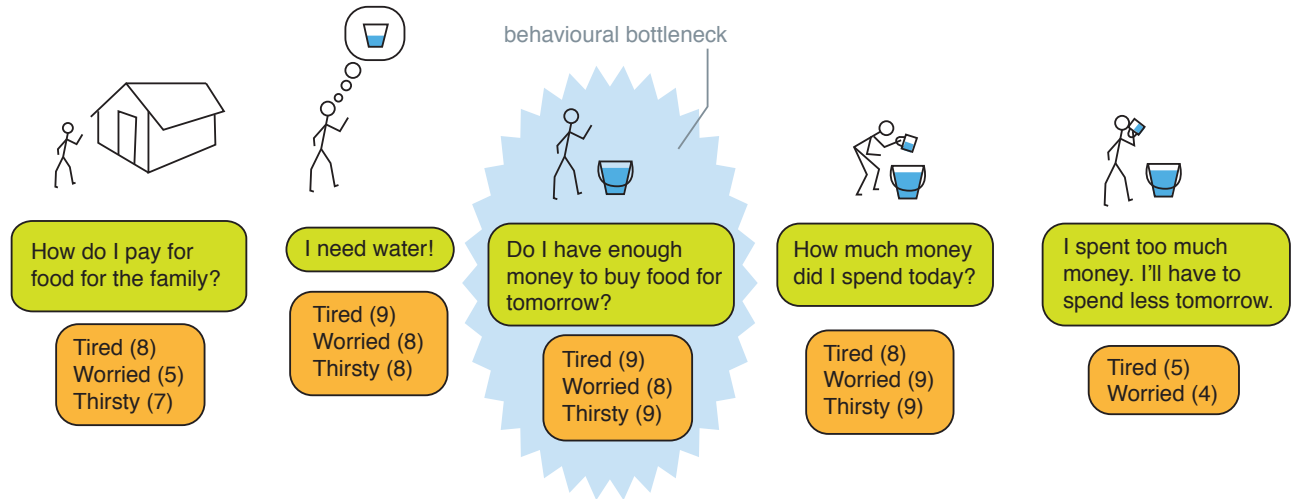


OBJECTIVE

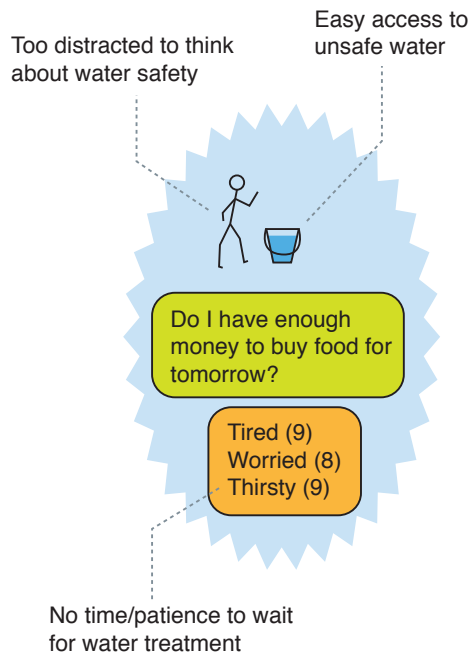
Applied behavioural analysis identifies where behavioural blockages are (we call them “bottlenecks”). These problem spots are not WASH behaviours, but behaviours that are necessary in order for a person to perform a safe WASH practice. It’s based on the understanding that behaviours happen in a chain: doing one thing leads to another. An earlier behaviour can prevent a later behaviour from happening. At the same time, a different earlier behaviour can make it more likely for a later behaviour to happen.

Once behavioural bottlenecks are identified, the team can use other tools to better understand what factors are preventing that bottleneck behaviour from happening or move on to designing behavioural interventions to unblock those bottlenecks. It's possible to design behavioural interventions without performing this kind of analysis, but this analysis is helpful if the team is having trouble figuring out what is blocking a behaviour from happening.

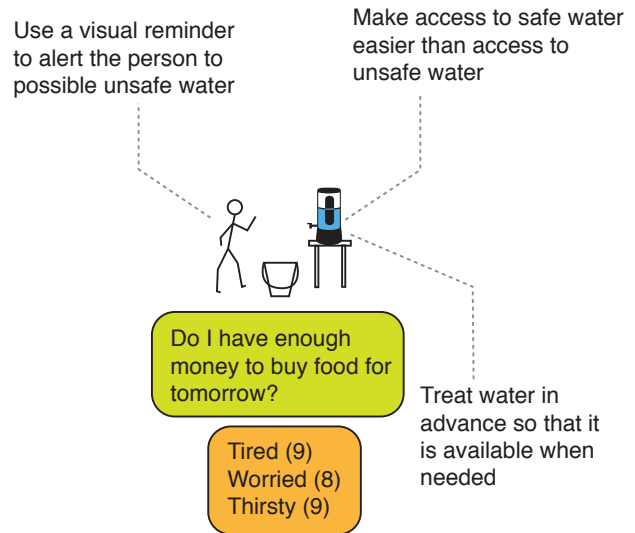
HOW PERSON BEHAVES NOW

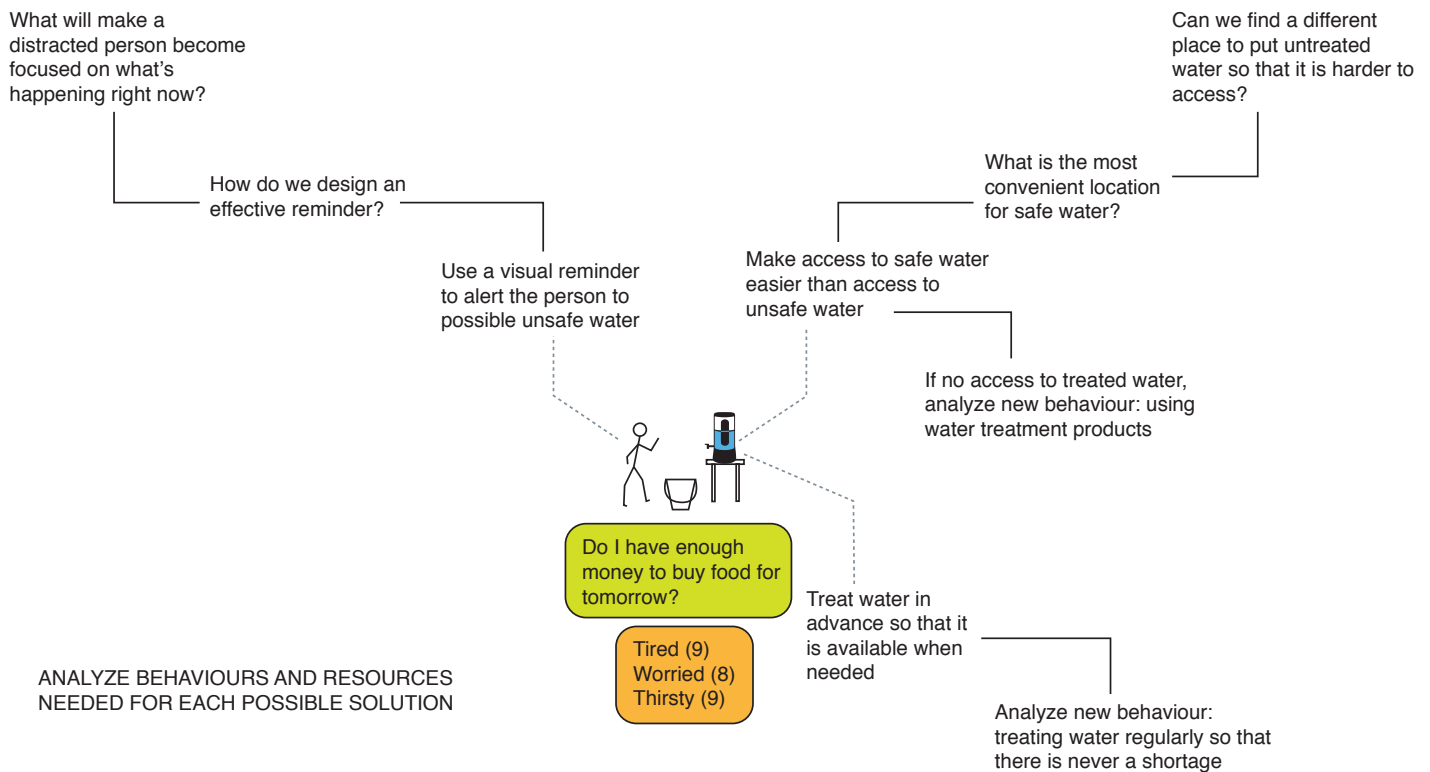


POSSIBLE FACTORS INFLUENCING CURRENT BEHAVIOUR (USE TOOLS TO IDENTIFY THESE FACTORS)



POSSIBLE WAYS TO CHANGE INFLUENCING FACTORS (USE SERVICE DESIGN TOOLS TO IDENTIFY SOLUTIONS)

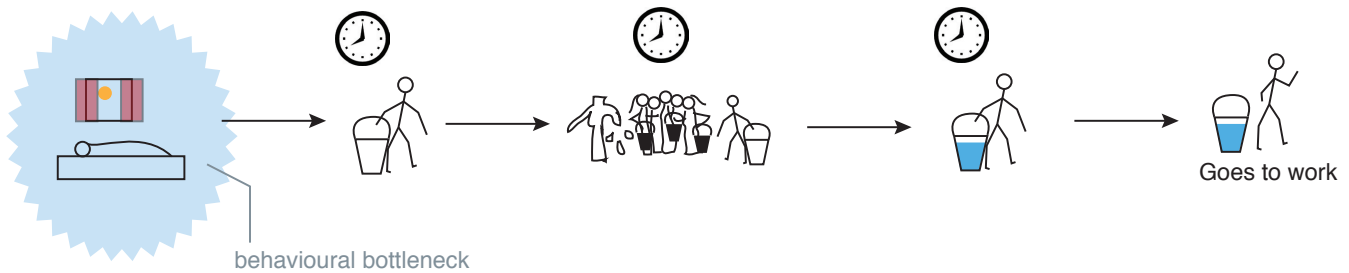




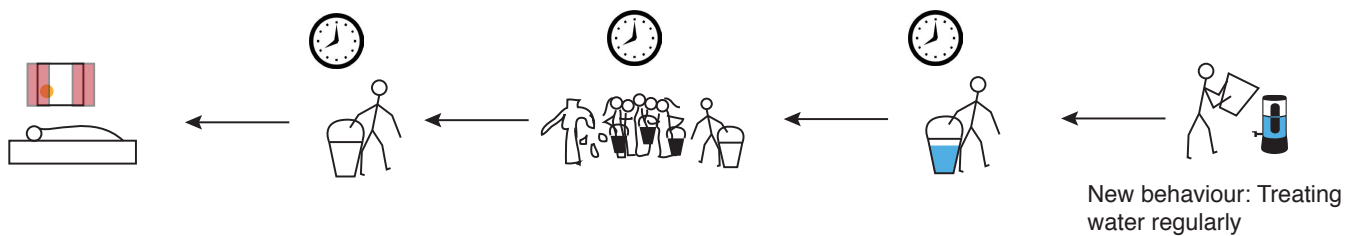
BREAK DOWN PROPOSED SOLUTIONS AND LOOK FOR MORE BLOCKAGES

With each proposed behavioural solution, we need to look for ways that they can be blocked. In the example shown above, one possible solution is to make sure that there is always treated water available. This solution, however, depends on a whole chain of other behaviours to make treated water available. It means that somebody in the household will need to be responsible for treating enough water, and that treating water will need to be a part of their daily routine. To understand why this behaviour may not be happening, we need to do another applied behavioural analysis and look at possible bottlenecks that are stopping this person from treating water regularly.

HOW PERSON BEHAVES NOW



BEHAVIOUR CHAIN NEEDED TO PERFORM NEW BEHAVIOUR



It is important to remember that the research, analysis, and design stages do not happen one after the other. Sometimes we will have to move from designing back to doing more research because we need more information. Sometimes we will move from analysis to design, and back to analysis again because the design gave us a new problem that we do not understand yet. It is important to remember that the research, analysis, and design stages do not happen one after the other. Sometimes we will have to move from designing back to doing more research because we need more information. Sometimes we will move from analysis to design, and back to analysis again because the design gave us a new problem that we do not understand yet.

Designing Behavioural Interventions

DESIGN PROCESS

It is important that the team understand that design is a very messy process. There are no steps that follow one another. They will go back and forth between steps as they discover more information, realize they are missing information, or find that the solution they designed causes new problems. That being said, there are some basic procedures that can help structure the process.

MATERIALS WE NEED

The team needs to have identified particular factors that are preventing a person from performing a safe WASH practice, as well as factors that allow a person to perform a safe WASH practice.

2 CHARACTERISTICS OF BEHAVIOUR CHANGE INTERVENTIONS

There are 2 characteristics of behaviour change interventions that the team should think about before they start coming up with ideas to solve the problem:

1. Mindful vs. Mindless
2. Encourage vs. Discourage

1. Mindful vs. Mindless

A **mindful** behaviour change intervention is designed to make people more aware of what they are doing. It creates a situation where people are presented with a choice to do things differently, rather than following a habit. It makes them “wake up” from their routines.

A **mindless** behaviour change intervention uses subconscious influences like emotion, perception and the environment to affect how a person behaves.

2. Encourage vs. Discourage

A behaviour change intervention can **encourage** people to perform a safe WASH practice or **discourage** them from performing a dangerous WASH practice.

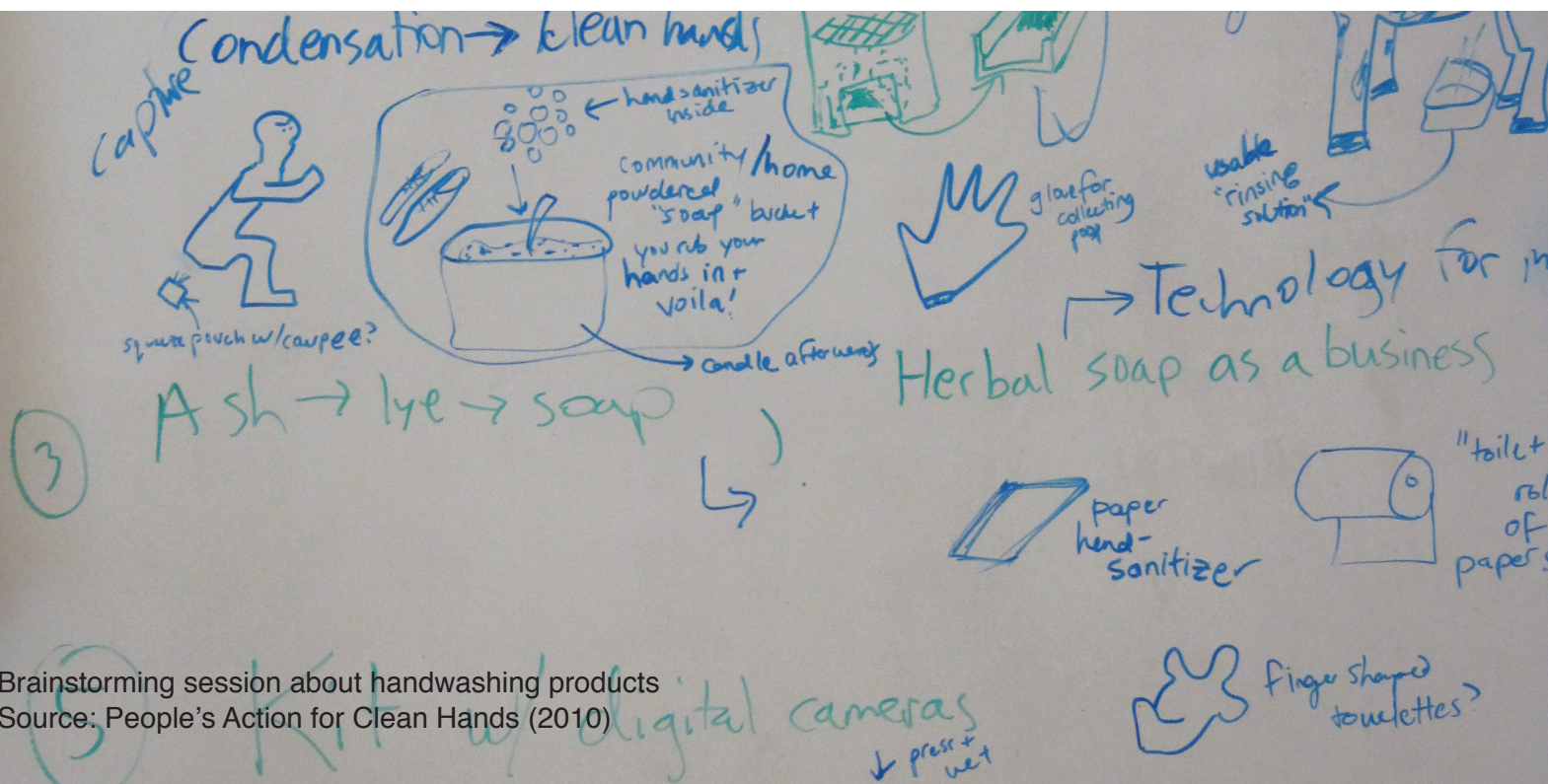
Behaviour change interventions are always a combination of these two characteristics. The team should discuss what combination is appropriate for the people and behaviour that it wants to target. There is no “right” combination for a behaviour change intervention - it is up to the team to decide what they think is best for the situation. It is also possible to change the combination later on if the team feels it is necessary.

EXAMPLES

	Mindful	Mindless
Encourage	Tying a bar of soap to the kitchen knife so that those who cook remember to wash their hands before they start preparing food.	Peer group where members voluntarily text each other every time they have washed their hands.
Discourage	Plant flowers in a spot where open defecation often happens.	Painting a line on the ground from each latrine door to a handwashing station so that people do not walk away without washing their hands.

BRAINSTORMING SESSION

Now that the team has picked a combination of characteristics, it needs to pick one factor that is influencing one behaviour. Write down or draw all of these decisions so that everyone keeps them in mind. All members of the team are now invited to contribute ideas for solutions that are in keeping with these decisions. It is important to remember that this process is not about discussing whose idea will work best. This process is about getting as many ideas down on paper as possible. Judging or giving feedback on somebody else's idea is not allowed. People are, however, allowed to add on to an idea or suggest a variation on it.



Testing

A PART OF THE DESIGN PROCESS

Testing is how designs progress. We can test an iteration in our heads using our imagination about how things will work, draw it out on a piece of paper to see if it makes sense, present it to other people to see what they think, or create a prototype and see how people interact with it. We can record observations about how it works in real life. We can ask for opinions from people who try it out in real life.

Even if an iteration “passes” all of these tests, it is important to know that it may still not have the effect that we think it will. A prototype may work very differently when it is placed in a different location, or when it has been used for a week or two. To know if a design is appropriate and if we should invest resources into making it a reality throughout the community, we must use controlled testing.

CONTROLLED TESTING

Controlled testing is an objective way to measure the impact of a design. It does this by setting up 2 test areas in the community. We will monitor the targeted WASH behaviour in both areas, but the design will only happen in one of them.

We call the area where nothing new is introduced the controlled group. We call the area where the design is put in place the treatment group.

The reason we need two groups is because things like the weather, the economy, changing security levels, and other forces in the environment change and can affect the impact of our design without us knowing. That means that even though our observations show an increase in a WASH behaviour, that increase may not be because of our design. It may instead be because of something else altogether.

A control group that is very similar to the treatment group in terms of location, number of people, number of men, women, children, elderly, those with disabilities, culture, economic status, etc. can help us see if there are forces changing how people are behaving. The diagram below represents a control group and treatment group:



Because we have “controlled” for all the other factors that may affect behaviours, we have more confidence that the changes we see in the treatment group are really caused by the design and not by other forces.

OTHER TESTING CONSIDERATIONS

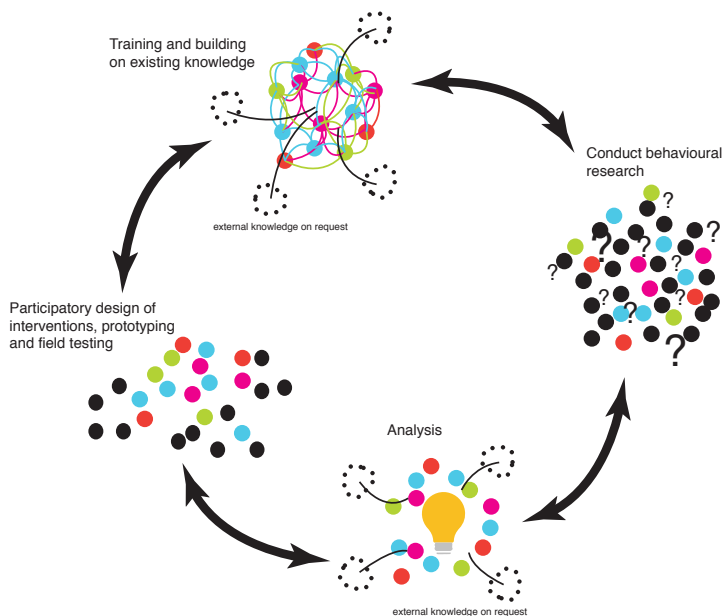
Randomization is another way that we can make sure the results we get are accurate and not caused by the particular people we are testing on. Members of the control and treatment groups should be selected randomly, ensuring that the composition of each group is similar (the number of people, age, sex, culture, locations, etc.).

Time is a major factor in behaviour change design. It is possible for a behaviour change design to only have an impact on a user the first few times the user interacts with it, so it is necessary to test out the design for a certain period of time. The longer that we can test out a design, the better. Deciding on the length of the testing period must take into consideration the budget, how long the community-based research team is willing to monitor the test sites, and how confident we want to be in our results. At the very least, 2 weeks to test out a prototype is necessary.

Recording observations during the test must be **systematic**. The community-based research team must be committed to recording data in a thorough and detailed manner, otherwise the entire test becomes invalid. Set clear expectations for the time and effort that is involved in testing so that the everyone understands and can commit to it.

Testing is not the end of the design process. Testing shows us where the design can be improved, so after a test is completed, the team needs to modify the design. Repeat the design process using the **Toolbox** and the **Design Behavioural Interventions** sections. This can mean that more behavioural research needs to be done or that more training is needed for the team.

A design can always be made better, so testing and modifying the design will happen many, many times. We can stop when the test results are to everyone’s satisfaction, or if there are no more resources left to continue (no more design budget left, team is no longer available).



Aligning Programme Components

BEHAVIOUR CHANGE IS EVERYWHERE

Behaviours are influenced all the time by millions of changing factors. To change behaviours therefore cannot be done by a single hygiene promotion activity. It needs to be a part of every hygiene promotion activity that is done, or else we may end up discouraging the very behaviour we are trying to encourage. From how we communicate with communities, to how we distribute hygiene kits, to the kinds of community events we hold, we have to make sure that they align with the behaviour change design that has been put in place.

Offering external incentives for a behaviour that we want to change can be counterproductive if we are also trying to make people see the behaviour as valuable all by itself. We may end up having no effect at all if we are using two behaviour change methods that cancel each other out. When we design a behaviour change intervention, we not only have to map out community influences, we also have to map out the influence of our activities. The same tools that we use to analyze and understand community WASH behaviours need to be applied to the hygiene promotion activities that we plan.

EMPOWERMENT

Community empowerment is a central principle in this behaviour change strategy, and it too needs to be included in all hygiene promotion activities. We cannot just give communities a voice in activities that we think are “easy” or “not that urgent”. Community empowerment needs to be a part of everything that we do even though it will take different forms depending on the activity.

Empowered communities have the capacity to think for themselves - to make decisions, problem-solve, identify needs, question what is presented to them, and create their own forms of knowledge. Empowerment therefore is not just about how an activity is planned, executed and monitored, but also about how ideas are created, communicated, and accepted.

This is particularly important in WASH education, where labeling answers as right or wrong needs to be avoided. Discussions about why a behaviour may sometimes be positive and sometimes be negative is needed. The goal of WASH education is not to get the community to agree with an NGO’s definition of what is good or bad, but to encourage the community to think for itself. We have to trust that by questioning assumptions and testing out beliefs, they will arrive at an answer that serves them well. Our role is to support that process of testing and questioning, not to direct that process towards the answers that we want.

Similarly, WASH monitoring needs to be carefully planned and executed to empower communities. The monitoring process can be seen as invasive and an attempt to control the population if it is not conducted transparently and if the community is not actively involved. Data represents communities: it is how communities are seen by others, like institutions or NGOs. It is important for communities to have a say in how they are shown and understood because data can be interpreted inaccurately or unfairly, leading to new conflict or biased policies. How information is collected, who collects it, what kind of data is collected, and how the data is protected are sensitive issues in this context. Communities should be able to make decisions about how much risk they are willing to expose themselves to, and be involved in designing protective measures.

Finally, the purpose of using participatory mapping tools and behavioural analysis is to find empowering ways to create behaviour change. Designing solutions that are based on policing or otherwise forcing people to perform the desired behaviour is not in line with this behaviour change strategy. There are many ways to create behaviour change, and the challenge for us is to find a way that respects individual choice.

Further Resources

COMMUNITY-BASED APPROACH

Slaymaker, T., Christiansen, K. & Hemming, I. (2005). "Community-based approaches and service delivery: Issues and options in difficult environments and partnerships." Retrieved from <https://www.odi.org/resources/docs/3822.pdf>.

PARTICIPATORY RESEARCH

Ackroyd, J. & O'Toole, J. (2010). Chapter 4: Ownership and Power. In Ackroyd, J. & O'Toole, J. (Eds.), Performing Research: Tensions, Triumphs and Trade-offs of Ethnodrama. Stoke-on-Trent: Trentham Books.

PRA TOOLS

FAO. "PRA Tool Box". Retrieved from <http://www.fao.org/docrep/003/x5996e/x5996e06.htm>.

Oxfam. (2012). "Participatory Capacity and Vulnerability Analysis: A Practitioner's Guide." Retrieved from <http://oxfamilibrary.openrepository.com/oxfam/bitstream/10546/232411/4/ml-participatory-capacity-vulnerability-analysis-practitioners-guide-010612-en.pdf>.

SERVICE DESIGN TOOLS

Tassi, R. (2009). Service Design Tools: Communication Methods Supporting Design Processes. Retrieved from <http://www.servicedesigntools.org/>.

DESIGNING BEHAVIOURAL INTERVENTIONS

IDEO. "The Field Guide to Human-Centered Design." Retrieved from <http://www.designkit.org/resources/1>.

note: this guide is most helpful for insight into the design process, not for collecting information or analyzing using a community-based approach

Ly, K., Mažar, N., Zhao, M. & Soman, D. (2013). "A Practitioner's Guide to Nudging." Retrieved from <http://www.behaviouraldesignlab.org/latestreports/practitioners-guide/>.

Egan, M. (2014). "Nudge Database v1.2." Retrieved from <https://www.stir.ac.uk/media/schools/.../Nudge%20Database%201.2.pdf>.

CONTROLLED TESTING

Hynes, L., Service, O., Goldacre, B. & Torgerson, D. (2012). "Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials." Retrieved from <https://www.gov.uk/government/uploads/system/.../TLA-1906126.pdf>.