

# Catalogue of behaviour change techniques (BCTs)



A Behaviour Change Technique (BCT) is an observable, replicable, and irreducible component of an intervention activity designed to change behavioural factors. That means a BCT is an intervention element that cannot be further decomposed, it is the elementary unit of behaviour change. While many of the BCTs address more than one behavioural factor, all but one have a predominant behavioural factor on which they operate.

## Information BCTs – Risk factors

The block of risk perceptions can be influenced by information techniques, meaning that with the given information the person is able to understand the menacing threat.

### Factor: *Factual knowledge*

#### **BCT 1 Present facts**

##### *Description*

Present information about the circumstances and possibilities of suffering from a risk, for example, contracting a disease, and present information about the relationship between a behaviour and the risk.

##### *Example of an intervention activity: Collecting water from a safe well*

During a household visit, participants are shown the health consequences of consuming contaminated water and how they could prevent it. Participants are also informed about the fact that contaminated water can still be used for other purposes than consuming it (e.g., washing clothes, showering). All explanations are supported with images.

##### *Example of an intervention activity: Handwashing*

At a community meeting, participants get the pictures of each stage of an f-diagram – a graph, illustrating the transmission routes of diarrheal disease, including transmission from faeces to food via hands. In small groups they try to put the pictures in the correct order of diarrheal disease transmission. The results are discussed in plenum.

#### **BCT 2 Present scenarios**

##### *Description*

Present situations in the everyday life of the participant that show how a behaviour leads to damage caused by the risk, for example, a disease.

##### *Example of an intervention activity: Collecting water from a safe well*

In a theatre, a woman's typical everyday activities and related risk situations are shown. One scene, for instance, shows a child crying because it is thirsty. Unfortunately, the mother ran out of safe water because she had forgotten to collect water at the safe well in time. In order to consolidate the child quickly, the mother gives him water to drink from the contaminated shallow well in the compound and the child gets sick. In another scene the woman is collecting water at the safe well and mixes the safe water with the remaining unsafe water in the storage container and also gets sick after drinking.

##### *Example of an intervention activity: Handwashing*

A movie showed in public sessions depicts different scenarios of how family members can get sick. First, a mother has just finished cleaning the latrine in the back of the courtyard while her son is playing next to it. Without washing her hands, she takes the boy by the hand and leads him back to the house where he eats something with his hands. The child, in this way eating the bacteria, shows up later in the movie, suffering from diarrhoea. Thereafter, the woman removes animal faeces in the courtyard before preparing food. This time, she does wash her hands after the contact with stool, but she forgets to use soap. Her husband eats the prepared food, and he gets sick. Further scenarios are

shown. In all scenarios, the bacteria that pass on from faeces to hands to food or directly into the mouth of different persons are visibly marked to highlight the transmission.

## Factor: *Vulnerability*

### **BCT 3 Inform about and assess personal risk**

#### *Description*

Present an individual qualitative and quantitative risk assessments for each person so the person realises their personal risk, for example, for contracting a disease. If the person has false beliefs about his/her invulnerability they should be discussed, and *personal risk information* should be given.

#### *Example of an intervention activity: Collecting water from a safe well*

In a community, a previously conducted analysis of the drinking water stored at household level has shown that 100% of the households consumed contaminated water. Each household is separately informed about the results of the study: “The water you drink in your household is contaminated. Your family is at risk!”. The promoter asks the participant: “What do you think, is your daughter going to have health problems if she continues to drink raw water?”. The same question is repeated for all household members, including the participant herself/himself. If the participant assesses his family’s vulnerability as low, the promoter asks further questions about the quantity of water consumed from the unsafe well and discusses the consequences on health.

#### *Example of an intervention activity: Handwashing*

A promoter observes handwashing behaviour in a household for an hour. Subsequently the promoter points out each situation, in which hands should have been washed but weren’t. The participants are asked “What do you think, are you/your husband/your children going to have health problems if you continue not to wash hands at the key time?”. The risk is emphasised by showing pictures of people also omitting handwashing at the specific moments who subsequently suffer from diarrhoea. The vulnerability of small children is especially stressed.

The promoter requests the primary caregiver of the children in the household to imagine she does not wash her hands at critical moments, and to assess the resulting risk for the children: “If you don’t wash hands with soap and water after using the latrine, how likely is it that one of your children gets sick?”. Different critical moments for handwashing are discussed in order to point out the importance of washing hands with soap and water at *all* critical moments, whether the dirt is visible or not.

## Factor: *Severity*

### **BCT 4 Arouse fear**

#### *Description*

Use threatening information that stresses the severity of damage caused by the risk, for example, the negative impact of contracting a disease. Arousing fear, however, always has to come with a solution, otherwise individuals may get stuck in fatalism (seeing no way out) and reactance (playing down severity because it is so threatening). Drastic graphic illustrations of pain or distress, bodily disabilities, decay, or even death should be used with much care and always be used together with an action-oriented message.

#### *Example of an intervention activity: Collecting water from a safe well*

In a face-to-face situation, a promoter shows pictures of people suffering heavily from a disease as a consequence of drinking unsafe water. In a next step, the promoter explains how to make water safe to drink.

*Example of an intervention activity: Handwashing*

In a radio spot, a very upset woman tells a friend that her neighbour's child has died from diarrhoea and how bad that was. Her interlocutor is equally shocked about the news. She says: "Pay attention! If you don't always wash your hands with soap and water after contact with stool and before handling food, the same could happen to your child!"

## Persuasion BCTs – Attitudinal factors

Beliefs about costs and benefits as well as feelings about (omitting) the behaviour can be changed by bringing forward strong arguments, using persuasive attributes or highlighting emotions.

### Factor: *Beliefs about costs and benefits*

#### **BCT 5 Inform about and assess costs and benefits**

*Description*

Provide information about costs and benefits of a behaviour and conduct an individual cost-benefit analysis. This includes not only financial costs and benefits, but also health or social consequences and the effort involved. The use of arguments that provide causal explanations, explain functionality, present novel and important information is very effective. Participants can be asked to assess their individual costs and benefits of the behaviour.

*Example of an intervention activity: Collecting water from a safe well*

During a household visit, the higher price of water from the safe well is explained by its better quality. For a better understanding, safe water is compared to other quality products known by the participant. The promoter asks the participant to think about the price difference between other high and low quality products: It is logical that one type of rice is more expensive than another type of rice because of its quality. It is also logical that butter is more expensive than oil because it is healthier. This is the same for water from the safe well; it costs more because it is healthier and of better quality than untreated water.

*Example of an intervention activity: Handwashing*

During a household visit, the promoter calculates together with the participant and considering the number of family members how much soap and water the household would need per week for always washing hands at critical moments and the corresponding costs. The total monetary costs are compared to the monetary costs of a medical treatment and the effort compared to the effort of taking someone to the hospital or caring for a sick family member.

#### **BCT 6 Use subsequent reward**

*Description*

Reward the person each time when she/he has performed the desired behaviour or achieved the behavioural outcome. The reward can be material (e.g., money or vouchers) or social (e.g., congratulation for having performed the behaviour). Social reward can be verbal or non-verbal.

*Example of an intervention activity: Collecting water from a safe well*

Participants get a voucher with 10 empty fields. Every time they collect water at the safe well, the vendor marks one of the designated fields with a stamp. After 10 stamps the person can hand out the token to the vendor and get 20 litres of water from the safe well for free.

*Example of an intervention activity: Handwashing*

Families can get a soap for free if they manage that all members always wash their hands with soap and water before eating, during one or two week(s). This would be controlled by visiting the household several times unannounced and checking whether the handwashing station is in function (soap and water available).

**BCT 7 Self-Incentive**

*Description*

Arrange with the person to reward her/himself each time when she/he has made progress in performing the desired behaviour. The reward should be something that the person really likes.

*Example of an intervention activity: Collecting water from a safe well*

Participants plan to relax for a moment when having collected water from a safe well or to drink a coffee or tea or eat something sweet.

*Example of an intervention activity: Handwashing*

Each time the participant has washed her or his hands with soap and water she or he sniffs the hands and perceives the smell as pleasant.

**BCT 8 Inform about and assess social and environmental consequences**

*Description*

Provide information about social and environmental consequences of performing the desired / undesired behaviour. Prompt imagining and comparing of future outcomes of changed versus unchanged behaviours.

*Example of an intervention activity: Collecting water from a safe well*

Participants who go to collect water from an unsafe well are informed (by promoters or posters) about the health risk that this poses to their family, especially their children: People who are dependent on them could get sick from the water that the participant is collecting at the unsafe well. Additionally, they act as a role model for the rest of the community. By showing them an unsafe behaviour, they are putting them at risk as well. They are prompted to imagine collecting water from a safe well and how it would impact their family and community. Likewise, participants who collect water from a safe well are informed that they are keeping their family safer and are acting as positive role models, thus having a social impact.

*Example of an intervention activity: Handwashing*

It is pointed out that handwashing keeps others safe as well as oneself. This can be shown with the respective messages on posters, a theatre play or by role-playing games in groups, whereby glitter or a coloured powder is transferred from “dirty” (glittery) hands to other persons’ hands or clothes throughout the game. The fact is stressed that this way, other people get sick because of one’s actions.

**Factor: Feelings**

**BCT 9 Describe feelings about performing and about consequences of the behaviour**

*Description*

Present the performance and the consequences of a healthy behaviour as pleasant and joyful and its omission or an unhealthy behaviour as unpleasant and aversive. The participant can be invited to assess and describe his/her feelings by him/herself, others can testify their feelings or feelings can be induced.

*Example of an intervention activity: Collecting water from a safe well*

A movie publicly shown at different locations in the community presents two women going to the safe water well to collect water. They visibly enjoy the time they spend together. At the well they meet an old friend and have a nice chat with her.

*Example of an intervention activity: Handwashing*

During a household visit, a promoter washes hands together with the participant. The promoter puts the participant in a good humour and asks him/her to describe the good feeling of washing hands with soap and water. The promoter takes a picture of the participant and attaches it next to the handwashing station in the household. The picture is to remind the positive feeling of washing hands and may increase liking to go to the handwashing station because the participant can watch his/her picture while washing hands.

**BCT 10 Prompt anticipated regret**

*Description*

Bring people to imagine the concerns and regret they would feel after performing undesired behaviours.

*Example of an intervention activity: Collecting water from a safe well*

During a household visit, the promoter asks the participant whether she cares about her family's health. Almost everyone answers affirmatively to such a question. Then, the promoter explains that it is crucial to collect water for drinking from the safe well to assure that all family members stay well and says: "Imagine one of your children gets sick and suffers from a severe diarrhoea because of the unsafe water he has drunk at home. Knowing how you could have prevented the suffering of your child, imagine how bad you would feel!" The participant is asked to describe the probable regrets.

*Example of an intervention activity: Handwashing*

The protagonist in a theatre is a mother who does not wash her hands correctly with soap and water at several critical moments because she is in a hurry, or she does not feel like washing hands. Consequently, her child gets very sick and nearly dies. The mother regrets having neglected to wash hands and worries about the child.

## Norm-enhancing BCTs – Norm factors

BCTs targeting norms are provided to change the perceived social pressure resulting from personal beliefs about other people's behaviour and personal beliefs about others' appreciation of the behaviour.

### Factor: *Others' behaviour*

**BCT 11 Inform about others' behaviour**

*Description*

Point out that a desired behaviour is already adapted by other persons. Alternatively, social comparison can be encouraged; the participant is invited to compare the own behaviour with the behaviour of persons that perform the desired behaviour. Giving the message that an undesired behaviour is regrettably frequent is counter effective.

*Example of an intervention activity: Collecting water from a safe well*

In a community, posters that say "In this household we drink water from the safe well" are given to households that already drink safe water. For those who cannot read the message is also illustrated with pictures. Fixed at the

entrance door the poster is visible to the neighbours and highlights how many households of the community already use water from the safe well.

*Example of an intervention activity: Handwashing*

Households build a handwashing station (e.g., tippy tap) in their courtyards. If it is placed at a visible spot, family members mutually perceive their handwashing behaviour. Additionally, other households can see the handwashing station and might build one in their own household.

**BCT 12 Prompt to talk to others**

*Description*

Invite participants to talk to others about the healthy behaviour in question. When trying to convince others the person herself is subject to self-persuasion because of generating and recalling arguments in favour of the new behaviour.

*Example of an intervention activity: Collecting water from a safe well*

Together with information about the advantages of collecting water from the safe well, participants receive two half price vouchers for 20 litres of water from the safe well. One token is for the participants themselves. As for the second token, participants are asked to pass it on to a friend or neighbour and to explain him/her the advantages of collecting water from the safe well. The water vendor makes sure that only one token per household is used.

*Example of an intervention activity: Handwashing*

At a community meeting, participants are asked to tell the other participants why they wash their hands with soap and water at critical moments and why the others should do the same.

**BCT 13 Prompt public pledging**

*Description*

Let people commit to a favourable behaviour and make their commitment public, thus showing to others that there are people who perform the behaviour. The commitment can be oral in front of an audience (pledging) or on the radio/TV, written at a public place, or by means of a sign attached to the committed person or his/her house so that others can see it. Signs of commitment or agreement may differ between cultures and groups, e.g. in some cultures, shaking hands with the promoter may be appropriate for men but not for women.

*Example of an intervention activity: Collecting water from a safe well*

Households that commit to always collect drinking water from the safe well install a blue flag on a long wooden stick on the rooftops. The blue colour of the flag represents safe drinking water.

*Example of an intervention activity: Handwashing*

Participants are asked if they commit to always wash their hands with soap and water before handling food and after possible contact with stool. If they agree, they get a certificate with the written commitment and a picture of themselves while washing hands with soap and water. The certificate and the picture are put up above the household's entrance door where visitors and passersby can see it.

**BCT 14 Social comparison**

*Description*

Prompt the participant to observe others performing the desired behaviour and to compare the observation with one's own performance.

*Example of an intervention activity: Collecting water from a safe well*

Animate the participant to observe who in her or his community collects water from a safe well during one week. This might lead to the awareness that he or she is collecting safe water less frequently than others and therefore concludes that he or she could perform better.

*Example of an intervention activity: Handwashing*

Ask the participants to note who in the community has a handwashing station and whether this has water and soap available. This might give rise to compare to the own taking care of the handwashing station and therefore it might augment the functionality of the handwashing station.

**Factor: Others' (dis)approval**

**BCT 15 Inform about others' approval/disapproval**

*Description*

Point out that important others support the desired behaviour or disapprove the unhealthy behaviour. Important others may be family members, neighbours, popular persons etc. Their approval/disapproval can be expressed by themselves, or a promoter can inform about their opinion. Alternatively, the person can be encouraged to reflect on others' opinion. Possible consequences of others' approval/disapproval can be highlighted.

*Example of an intervention activity: Collecting water from a safe well*

The village leader communicates through loudspeakers his approval of collecting drinking water at the safe well and that he would be proud to be the leader of a village that drinks safe water. He points out that this is how he can be sure that his community stays well.

*Example of an intervention activity: Handwashing*

Participants get a voucher from a neighbouring community health worker. It shows a woman washing her hands with soap and water, with the following text: "I (community health worker's name) appreciate that you (participant's name) always wash your hands with soap and water before handling food and after contact with stool."

**BCT 16 Prompt to resist social pressure**

*Description*

Ask participants to anticipate and prepare for negative comments from others or for pressures towards the undesired behaviour (e.g., verbalised expectations towards the undesired behaviour or the routine to jointly perform an undesired behaviour). Possible reactions to overcome the social barriers can be developed e.g., through role plays or discussing video scenarios.

*Example of an intervention activity: Collecting water from a safe well*

During a group meeting a participant identified the joint water collection at the unsafe well together with her/his neighbour as a social barrier. She/he reenacts the situation when the neighbour comes to pick her/him up to collect water at the unsafe well as usual. Different possible reactions are tested and exercised in order to go to the safe well alone or convince the neighbour to come along.

*Example of an intervention activity: Handwashing*

During a group meeting a movie is shown which presents different scenarios on how one can resist being hindered from handwashing due to someone else's expectation. For example, a woman is coming from the latrine and wants to wash her hands. Her husband disrupts her attempt and criticises her for wasting soap by washing hands so often. The woman explains him that handwashing with soap at key times is an essential mean to keep the family healthy and that



this saves money otherwise spent for medical treatments. Then she picks the soap and washes her hands thoroughly. In moderated groups, the participants discuss the scenarios and reflect on additional possible reactions.

### **Factor: Personal Norms**

#### **BCT 17 Provide a positive group identity and use in-group terms**

##### *Description*

Describe people already engaged in the desired behaviour in an attractive way, to increase the attractiveness of the behaviour itself. Use terms which evoke a feeling of belonging to this desirable group.

##### *Example of an intervention activity: Collecting water from a safe well*

After an information session about the consequences of drinking unsafe water, the promoter emphasises: “People that collect drinking water at the safe well have a strong personality, show that they care for their family and are well respected in the community!” or the promoter moderates a discussion among the participants about the positive characteristics of the people drinking water from the safe well.

##### *Example of an intervention activity: Handwashing*

In a radio spot, two men talk about how lucky they are that their spouses always wash hands with soap and water before handling food and after possible contact with stool, and that they are very good mothers!

#### **BCT 18 Prompt identification as role model**

##### *Description*

Ask participants to set a good example (e.g., for children) by engaging in the desired behaviour so as to influence others’ behaviours by one’s own behaviour.

##### *Example of an intervention activity: Collecting water from a safe well*

Women are encouraged to join a community health club that campaigns for the health of the villagers. Club members are motivated to set a good example and collect their drinking water at the safe well.

##### *Example of an intervention activity: Handwashing*

A movie is watched at organised meetings for women in the community. Several scenes in a movie show how a child imitates his mother, also in washing hands. If the mother uses soap, the child also uses soap. If she does not, the child does alike. After the movie a health promoter explains: “Children imitate their parents. If you want your children to stay well, it is important that they wash their hands with soap and water at critical moments. You are a model to them; they will imitate what you do. So wash your hands with soap and water after possible contact with stool and before handling food!”.

#### **BCT 19 Highlight conflict**

##### *Description*

Activate the personal norms of the participants for example by asking them what is important for them in their lives. Then bring one of these personal norms in contradiction (if this is the case) to the actual undesired behaviour.

##### *Example of an intervention activity: Collecting water from a safe well*

A participant might state that for her / for him it is most important that their kids are healthy and grow well. Tell the participant that his/her kids might not grow well if they drink unsafe water because then they will frequently suffer of diarrhoea.

*Example of an intervention activity: Handwashing*

For a participant it might be of utmost importance to be respected as a clean and good-looking person. Challenge that the person might look like she/he wants if not washing hands frequently.

**BCT 20 Set normative nudges**

*Description*

Activate participants' personal norms in the moment of the behavioural decision. This can happen through symbols of things or persons that the person values and that would be protected through the respective behaviours. In order to be effective, these nudges have to be placed in the person's environment in a way that the person perceives them when deciding to perform the behaviour or not.

*Example of an intervention activity: Collecting water from a safe well*

Take a picture of the participant's children and put it at the place where the containers for water collection are stored.

*Example of an intervention activity: Handwashing*

Place a symbol for a healthy family near the place for eating in a way that family members can see it before eating.

**BCT 21 Highlight alignment**

*Description*

Make the alignment of personal norms with other benefits of the desired behaviour verbally. This BCT should only be applied in combination with another BCT targeting personal norms.

*Example of an intervention activity: Collecting water from a safe well*

After conducting one of the BCTs 17 to 20, ask the participant whether there are any advantages of collecting water from a safe well for him or her personally. These could include that the safe well is located closer to the house or that going there would be a pleasant opportunity to socialise with other people.

*Example of an intervention activity: Handwashing*

After conducting one of the BCTs 17 to 20, ask the participant whether there are any advantages of handwashing for him or her personally. These could be the good smell of freshly washed hands, the feeling of being clean, or less risk of falling sick.

## Enabling BCTs – Ability factors

Enabling BCTs help people to gain confidence in their capability to perform a behaviour, which means that they get a better appraisal of what they can do.

### Factor: Action knowledge

**BCT 22 Demonstrate behavioural options**

*Description*

Inform about behavioural options. Inform the participant about the existing alternatives to the undesired behaviour. This BCT should be used in case several alternatives to the risk behaviour exist.

*Example of an intervention activity: Collecting water from a safe well*

Inform the participant which options he or she has to consume safe water. These could be collecting water from a safe well or treating unsafe water by locally available methods. Provide specific information, such as where safe wells are located, which treatment options are available and where to get the required material.

*Example of an intervention activity: Handwashing*

Inform about and discuss different options of building a handwashing station, especially those which allow unassisted moistening and rinsing of both hands.

**BCT 23 Provide instruction**

*Description*

Convey know-how in order to improve a person's knowledge about how to perform the respective behaviour.

*Example of an intervention activity: Collecting water from a safe well*

At a community meeting the new well is presented and it is explained how to operate it. Participants also get informed about the different locations of the safe wells and the business hours.

*Example of an intervention activity: Handwashing*

During a household visit a promoter explains a poster which depicts the different steps of handwashing, including use of soap. The poster is then fixed at the usual handwashing place in the household.

**Factor: Confidence in ability**

**BCT 24 Demonstrate and model behaviour**

*Description*

Demonstrate a behaviour and prompt participants to pay attention to others performing the behaviour and its consequences in their everyday life or show movies or pictures of people performing the behaviour. Especially a model that is similar to the observing person increases the feeling of "I am also able to do it". A popular model can increase the desire to emulate. Additionally, observing the positive consequences of the desired behaviour for others (or the negative consequences of the undesired behaviour) can encourage a behaviour change.

*Example of an intervention activity: Collecting water from a safe well*

Several posters, hung up at public places, show women from the village collecting water at the safe well. On one of the posters the village leader's spouse is seen with her water vessel on the way to the safe well.

*Example of an intervention activity: Handwashing*

A promoter demonstrates how to build a tippy tap (handwashing station) during a public session. After construction, persons of different ages and sexes are requested to try out the tippy tap and wash their hands with soap and water. Thus, everyone in the public is offered a model to identify with.

**BCT 25 Prompt guided practice**

*Description*

Train participants in behaviour enactment by giving instructions, demonstrating the behaviour, letting him/her practice and giving feedback about the correctness of the performance. Being guided can help to overcome possible hesitations about the performance of the behaviour.

*Example of an intervention activity: Collecting water from a safe well*

A female participant hesitates to go to the new safe well because she would have to pass a public place that is mainly visited by men, and she is afraid that they might bother her. A female promotor accompanies her on her first visit to the new safe well. The participant experiences that she can pass the public place without being approached or mocked by men. This strengthens the participant's confidence in her ability to collect water from the safe well.

*Example of an intervention activity: Handwashing*

During a household visit, the promoter and the participant wash hands together. The promoter shows and explains how to wash hands correctly. She/he makes sure the participant respects all the important steps, has water available at the handwashing station and uses soap.

**BCT 26 Prompt behavioural practice**

*Description*

Prompt participants to practice the new behaviour. This can be done in an organised setting like during group meetings or as homework. Participants could also be encouraged to try out alternative options of the desired behaviour and choose the most convenient one (e.g., different methods for water treatment). Practice improves the performance, especially of new behaviours. For known behaviours, repeated performance is crucial for habit development.

*Example of an intervention activity: Collecting water from a safe well*

During a weekly meeting of the community health club, the members collectively go to the safe well to collect water. Homework for the following week is to try out the new safe well at least once more.

*Example of an intervention activity: Handwashing*

During a household visit a promoter suggests to the participant to try to always wash hands with soap and water at critical moments that day. The promoter asks to stay in the household for two hours to observe the handwashing behaviour. The promoter reminds the participant each time she/he forgot/neglected handwashing.

**BCT 27 Organise social support**

*Description*

Prompt participants to seek practical or emotional support from neighbours, friends, acquaintances, or relatives and/or to initiate social support groups. This can include monetary and physical help, action knowledge or (verbal) emotional support.

*Example of an intervention activity: Collecting water from a safe well*

Supported by a promoter, two neighbours arrange to go to the safe well every morning and one of the neighbours has a trolley which can be used by both for transporting the water containers. The promoter helps them to find a time that is convenient to both.

*Example of an intervention activity: Handwashing*

Group meetings with all members of a household are organised. A promoter moderates the meeting and requests participants to think about who could remind whom in which situations to wash hands with soap and water if he/she doesn't. A child for example, who sees the mother is just about to cook could ask her if she has washed her hands with soap.

### **BCT 28 Set graded tasks/goals**

#### *Description*

Prompt participants to learn difficult behaviours including several tasks step by step. The participant begins with a very easy task or part of a task. Once this first task is managed and practiced, a second step is tackled. This way, the participant has a feeling of success and is motivated to continue. Trying to change behaviour all at once can seem stressful, the person may feel unable to manage it and abandon the new behaviour in face of initial failings.

#### *Example of an intervention activity: Collecting water from a safe well*

Members of a community health club collectively set weekly tasks. In the first week, they collect water at the safe well once. From the second to the 6<sup>th</sup> week, they collect as much as they need for their children. From the 7<sup>th</sup> to the 9<sup>th</sup> week, they try to collect drinking water at the safe well for all household members.

#### *Example of an intervention activity: Handwashing*

During weekly household visits, a promoter prompts the participant to set graded tasks for handwashing with soap and water at critical moments. First, handwashing before cooking could be tackled. When the participant has achieved the first goal, a second goal is set (e.g., washing hands with soap and water before all sorts of handling food). The final aim is to always wash hands with soap and water at all critical moments.

### **Factor: Confidence in continuation**

### **BCT 29 Reattribute past successes and failures**

#### *Description*

Prompt participants to attribute successes as personal achievements and failures to adverse circumstances or to not yet developed but achievable skills instead of to personal deficiency.

#### *Example of an intervention activity: Collecting water from a safe well*

At a group meeting, everyone tells a situation when it was difficult to collect water at the safe well, but the person managed to do it anyway. Collectively they point out the good acting of the person in that difficult situation.

#### *Example of an intervention activity: Handwashing*

In a face-to-face session, the promoter asks the participant to describe different situations where she/he did not wash hands when required and other situations where the person managed well to wash hands with soap and water at a critical moment. For situation where the participant did NOT wash hands, the promoter attributes the omission to the circumstances. If the participant DID wash hands with soap and water, the promoter praises the person and stresses his/her merit.

### **BCT 30 Use arguments to bolster self-efficacy**

#### *Description*

Convince participants that they will be able to perform and/or maintain the desired behaviour for example by emphasizing that the person will succeed because similar others also have succeeded. Alternatively, people can be prompted to think by themselves about arguments why they are able to perform the behaviour.

#### *Example of an intervention activity: Collecting water from a safe well*

After a public information session, the instructor says: „I know the safe water is farer away than the water from the pond, but I also know you will be able to manage your daily routine as you do already very well! The women from the close-by village also succeeded in collecting their water from the safe well, so will you!”

*Example of an intervention activity: Handwashing*

A promoter first talks with the participant in order to find out in which situations the participant normally washes hands and if she/he uses soap. Then, he assures: “You will be able to always wash your hands with soap and water at critical moments! You already succeed to wash your hands with soap and water before eating, so you will also manage to wash your hands before preparing food and after possible contact with stool! Besides, it doesn’t take a lot of time. You are a good mother who already cares very well for her family! You are definitely able to do it!”

**Factor: Confidence in recovering**

**BCT 31 Prompt coping with relapse**

*Description*

Tell participants that lapses are normal when adopting a new behaviour and – though discouraging – not a sign of failure. Participants should learn to differentiate a single lapse (i.e., part of every behaviour change process) from complete relapse (i.e. abandonment of the new behaviour).

In order to motivate a person to restart performing the behaviour after a lapse this BCT can favourably be combined with different other BCTs, such as *Reattribute past successes and failures* (BCT 24), *Use arguments to bolster self-efficacy* (BCT 22), *Organise social support* (BCT 21) or *Prompt (self-)monitoring of behaviour* (BCT 27). BCTs for planning the restart can also be useful.

*Example of an intervention activity: Collecting water from a safe well*

The promoter prompts the participant to formulate an intention about how to restart performing the behaviour, e.g., in case of a lapse, the person would inform the neighbour and they would collect water from the safe well together the next day.

*Example of an intervention activity: Handwashing*

During a household visit, the promoter asks the participant to think about the last time she/he learned something new, e.g., cooking a new dish. At the beginning it was probably not as tasty as when the mother cooked it, but after some time she/he did very well. It still happens sometimes that the participant adds too much salt, but that doesn’t mean she/he is a bad cooker, it’s just a mistake that might happen from time to time. The same it is with handwashing. If one doesn’t wash hands at all times, it is not a complete failure.

## Planning BCTs – Self-regulation factors

Planning interventions in general help to translate goals into actions by preventing distraction, avoiding falling back into old habits or inhibiting failing to get started. Relapse prevention BCTs can enable persons to foresee high-risk situations in which lapses may happen and to avoid them.

**Factor: Action planning**

**BCT 32 Prompt specific planning**

*Description*

Stimulate participants not only to formulate *what* she/he will do, but also *when*, *where*, and *how* she/he intends to achieve his or her goals. One form of planning is the daily routine planning where the person is prompted to plan exactly *when* to perform the desired behaviour in the course of daily life. The ideal moment is discussed with the person in order to assure a realistic planning. Depending on the behaviour, more than one moment in the daily

routine can be defined. Detailed planning supports the achievement of a set goal. The more specific the planning is, the higher is the chance that the person will actually remember to engage in the behaviour in the planned moment. Ideally, it leads to a (nearly) automatic performance of the behaviour.

*Example of an intervention activity: Collecting water from a safe well*

During a home visit, the participant is asked to define after which activity, at which well and how many vessels of safe water she/he will collect each day. The promoter writes it down on a form and illustrates it with stickers that represent the time of the day or the number of vessels etc. The filled form is handed out to the participant who is invited to hang it up next to the water storage.

*Example of an intervention activity: Handwashing*

During a home visit, in addition to planning the handwashing routines in detail, the maintenance of the handwashing station is also planned. The participant is requested to specify first, a moment in the daily routine to check whether water has to be refilled at the handwashing device; second, where the person will take the water for refilling from (e.g., a certain well or from the water storage container in the household); and third, how much water she/he will refill.

## **Factor: Action control**

### **BCT 33 Prompt (self-)monitoring of behaviour**

*Description*

Invite participants to (self-)monitor their behaviour by means of recording it (e.g., frequency). Participants can monitor their behaviour themselves or ask another person to do it. Monitoring increases the awareness of one's behaviour and thus reinforces the behaviour.

*Example of an intervention activity: Collecting water from a safe well*

Participants get a form or some other device for record keeping (e.g., sticks or small stones) and are invited to hang/put it up at home. They are asked to record every day the quantity of drinking water collected at the safe well and the quantity of drinking water collected at the unsafe well.

*Example of an intervention activity: Handwashing*

Households get a weekly calendar to hang up at the handwashing station. On the left side of the calendar household members list their names or attach a sticker for each member. On the right side of the calendar are columns for each day of the week, into which the household members can put a mark each time they washed their hands before/after a key time.

### **BCT 34 Provide feedback on performance**

*Description*

Give participants feedback on their behaviour performance. Feedback helps to assess one's performance and if necessary to correct it. Feedback provided over a longer period can reveal improvement and give the participant confidence in her/his abilities.

*Example of an intervention activity: Collecting water from a safe well*

For one month, the water vendor at the safe well gives weekly personal feedback to the costumers, e.g. "This is the third week you collected water at the safe well every day – congratulations, you are doing very well!".

*Example of an intervention activity: Handwashing*

For one month, a promoter visits the participant once a week. Together they evaluate the self-monitoring form the participant has filled in during the last week. Depending on how often the participant has washed hands with soap at critical moments, they put a sticker with a happy, a neutral or a sad smiley on the participant's form.

**BCT 35 Highlight discrepancy between set goal and actual behaviour**

*Description*

Invite the participant to regularly evaluate the actual behaviour performance (e.g., correctness, frequency and duration) in relation to the set behavioural goal. Therewith, discrepancies between the current behaviour and the set goal may be revealed. The evaluation can be done either by the person herself/himself or by a third person, e.g., a health promoter.

*Example of an intervention activity: Collecting water from a safe well*

During a home visit, a promoter asks the participant how many vessels she/he has collected from the safe well this week. Together, they evaluate whether there is a difference between the previously set goal and the actually collected number of vessels. Example of an intervention activity: Handwashing

Each night, participants reflect on the behavioural goal they set the previous week (e.g. washing hands with soap and water at all key situations) and their actual behaviour during the ending day (e.g. having washed hands with soap after contact with stool and before cooking and eating but not before feeding the baby).

**Factor: Barrier planning**

**BCT 36 Prompt coping with barriers**

*Description*

Ask participants to identify barriers to behaviour change and plan solutions to those barriers. Participants can think about strategies she/he has already used in previous situations or develop new solutions. Identifying barriers alone might decrease self-efficacy and thus reduce the desired behaviour; finding solutions to frequently occurring barriers, however, is crucial.

*Example of an intervention activity: Collecting water from a safe well*

During home visits, participants are asked to name three situations or things that do or could hinder them in collecting water from the safe well (e.g., the safe well she normally collects water from is broken). For each barrier the promoter and the participant think about a possible solution (e.g., identifying the closest other safe well where she/he will collect water instead). The promoter writes both, the discussed difficulties and the solutions, into a form and illustrates the barrier-solution-pairs by means of stickers. The participant is asked to hang up the filled form in the household.

*Example of an intervention activity: Handwashing*

The promoter arranges a meeting with the primary caregivers of five neighbouring households. The participants are requested to each name the reasons why they might/do fail to always wash their hands with soap and water at critical moments even if they intend to do so. All difficulties are jointly discussed in order to find a solution to them. Participants may have faced similar problems and can exchange on approved strategies for overcoming them.

**BCT 37 Restructure the social and physical environment**

*Description*

Prompt participants to remove social and physical bolsters of the undesired behaviour so as to interrupt habitual procedures and to facilitate the desired behaviour. Relevant bolsters may be social situations or a certain physical



environment that trigger the undesired behaviour. Bolsters of an undesired behaviour are very individual and need to be identified separately for each participant or household.

*Example of an intervention activity: Collecting water from a safe well*

During household visits, participants are prompted to think about what does normally facilitate to go to the unsafe well. The promoter goes through the course of action of the participant and if necessary, they reenact the habitual sequence of initiating and going to the unsafe well in order to identify undesired social and physical bolsters. Together, they remove the identified social and physical bolsters (e.g., removing the wooden plank for crossing the stream to go to the unsafe well or arrange with the neighbour to meet at the safe well instead of at the unsafe well).

*Example of an intervention activity: Handwashing*

This BCT is not applicable for handwashing as the undesired behaviour is *not* to wash hands.

## Factor: Remembering

### **BCT 38 Use memory aids and environmental prompts**

#### *Description*

Prompt the participant to install memory aids or to exploit environmental cues so as to help to remember the new behaviour and to trigger it in the right situation. A cue is most effective if it is placed where the behaviour is meant to happen. One option is to use a poster that depicts for example the various steps of the behaviour as a cue. It is also possible to use environmental triggers that remind to perform the behaviour. In some cases, it is sufficient to rearrange an already existing device in the household so that it serves as a cue (e.g., putting soap and water visibly in front of the latrine).

*Example of an intervention activity: Collecting water from a safe well*

Participants are motivated to put an extra vessel designated for collecting drinking water next to the other transport containers in order to remind them to fetch drinking water at a different well than water designated for other purposes.

*Example of an intervention activity: Handwashing*

Households are encouraged to hang up a poster with hands that are being washed with soap and water at the cooking area in order to remind handwashing before touching food.

## Factor: Commitment

### **BCT 39 Prompt goal setting**

#### *Description*

Invite participants to formulate a behavioural goal or intention (e.g., I will pay attention that my children drink safe water).

*Example of an intervention activity: Collecting water from a safe well*

During a household visit, to give an example to the participant, the promoter tells the participant what goal she/he has set (e.g., from now on, I collect my drinking water at the safe well). Then, she/he asks what the participant wants to do and invites her/him to formulate her/his own intention and to tell it aloud.

*Example of an intervention activity: Handwashing*

During a group meeting, participants are prompted to set the goal that they will wash hands in all key situations (e.g., before feeding a child). The key situations, which are depicted on a poster, are each addressed separately.

**BCT 40 Prompt to agree on a behavioural contract**

*Description*

Invite the participant to agree on a behavioural contract to strengthen her/his commitment to a set goal. The contract can be in writing or orally (or e.g., represented by a picture or a handshake), and in form of a self-commitment or an agreement with another person or the public (see also public commitment).

*Example of an intervention activity: Collecting water from a safe well*

At a community meeting, people sign a contract to collect their drinking water at the safe well. Illiterate participants sign with a finger thumb.

*Example of an intervention activity: Handwashing*

During a household visit, participants sign a contract to wash their hands with soap and water before handling food and after possible contact with stool. Participants sign two copies, one for the person itself and one which the promoter keeps.