

The compendium of self-enactable techniques to change and self-manage motivation and behaviour (v1.0)

Version for members of the general public

Keegan Knittle, Matti Heino, Marta M. Marques, Minna Stenius, Marguerite Beattie,

Franziska Ehbrecht, Martin S. Hagger, Wendy Hardeman, Nelli Hankonen

Welcome to the compendium of self-enactable techniques. It lists techniques to help you change or self-manage your motivation or behaviour. This document provides information about how the compendium was developed and how it might be used. It also defines a few key terms to help you understand each technique and example.

To develop this compendium, our research group examined the scientific literature around behaviour change interventions and self-management programs. In doing so, we identified many techniques that could be used to change or self-manage behaviour. We focused only on techniques that people could use *on their own*, without needing a psychologist, nurse, personal trainer or other person to deliver it.

The 123 techniques in this compendium have been gathered from various sources. Similar techniques are numbered together. The choice of which techniques to use is up to you. Each technique has a number, label, and definition. Each technique also has an example of how it might be used to change a health-related behaviour (e.g. physical activity, nutrition, smoking, drinking alcohol). The techniques do not contain examples for all possible health behaviours and situations. However, with some adaptations, each technique can be used to target most behaviours.

How to use the compendium:

1. Start with technique #1 (Agenda mapping). Identify a behaviour that you might want to consider changing or self-managing.
 - a. This is called your 'target behaviour'.
2. Choose another technique to help you change or self-manage your target behaviour.
 - a. Check for prerequisite techniques. If any are listed under the technique you chose, try those first before trying this technique.
3. Read the definition and examples of your chosen technique.
 - a. If you see a word or term that you do not understand, check the glossary below for a definition.
 - b. If the example mentions your target behaviour and seems like it could work for you, skip to step 5. Otherwise, proceed to step 4.
4. If needed, adapt the chosen technique to fit your target behaviour and preferences.
 - a. For example, if an example only mentions physical activity, but you wish to stop smoking, change the example so that it relates to smoking.
 - b. With small changes, most techniques can help you change or self-manage any target behaviour.
 - c. This step can be challenging. Feel free to ask friends or family for help in making the technique work for you. You can also email our team to ask for help.
5. Try the technique out in real life. Did it help you feel more motivated? Did it help you to change your target behaviour?
6. Try different techniques until you find what works best for you.

Some notes about using the compendium:

1. Just because the compendium lists a technique, does not necessarily mean that it will work for you and for the specific behaviour you are targeting. The compendium makes no claims about how well the techniques work, and certain techniques might work better for some people or some behaviours than they do for others.
2. Being very motivated to change does not necessarily mean that it will happen easily, or at all. If you are very motivated, but you haven't managed to change your behaviour yet, consider using 'self-regulation techniques.' Self-regulation techniques are listed from #5 to #18, and are especially helpful in turning motivation into action.
3. Some techniques ask you to consider the negative side of changing a behaviour. However, when it comes to changing behaviour, focusing on positives is generally more recommended than focusing on negatives. Don't focus on these negative aspects too much.
4. Some techniques may (in some cases) lead to unintended negative consequences. These potential risks are highlighted in red. Although these are generally minor, these should be considered before deciding to use a particular technique.
5. Some techniques require you to seek out information. This information can be obtained from many different sources, including the internet, TV, radio, print media, family, friends, co-workers and health professionals. When seeking out information, try to prioritize credible and reputable sources whenever possible.
6. We are currently expanding the compendium to include examples for more health behaviours. If you have adapted one or more of the techniques, we would love to hear how you did it and how it worked for you. Contact information is below.

Glossary of Key Terms

Motivation, behaviour, and outcomes

- **Behaviour** – The things that you do with your body.
- **Motivation** – A driving force that guides and directs behaviour.
 - Motivation occurs within the mind, and is different from behaviour.
- **Target behaviour** - A behaviour that you are considering changing or are currently taking active steps to change or self-manage. This includes reducing unwanted ('stop') behaviours and/or increasing wanted ('start') behaviours.
 - Some examples of '**stop**' behaviours: cigarette smoking, alcohol consumption, unhealthy food intake, sedentary behaviour (e.g. prolonged periods of sitting or lying down)
 - Some examples of '**start**' behaviours: physical activity, healthy food intake, condom use, sun protective behaviours (e.g. covering exposed skin, using sunscreen)

- **Outcome** - A desired result of pursuing a particular target behaviour. These can be physical, mental, social or other.
 - Some examples of outcomes include: weight, blood pressure, cholesterol levels, functional ability (i.e. the opposite of disability), positive social relationships, and psychological well-being.

Consequences

- **Consequences** - Events or states which occur as a result of performing a behaviour. These are closely related to outcomes, but can be positive, negative or neutral.

Values and beliefs

- **Belief**: Any idea that you consider to be true, but which may be based on inconclusive evidence.
- **Values** - Stable long-lasting beliefs about what is good, desirable or important.
 - Examples include health, friendship, fairness and integrity.
- **Self-identity**: Your own view of yourself.

Rewards and Incentives

- **Reward** - Something desirable given (or received) in recognition of effort or achievement.
 - Rewards can be given in relation to behaviours and outcomes, and always occur AFTER you have made significant effort or achievement.
 - There are many ways to reward yourself, and these can include rewards related to entertainment, relaxation, self-care, shopping, enjoyment, food, travel or nature.
 - For more reward ideas, you could check this list of 155 ways to reward yourself: <https://www.developgoodhabits.com/reward-yourself/>
 - Note: The list of self-rewards was created by a 3rd party, and the developers of this listing take no responsibility for its contents.
- **Incentive** - A plan of the conditions under which you will give yourself a specific reward.
 - Incentives must be setup BEFORE you begin pursuing the behaviour or outcome
 - They usually take the form "If I make X amount of progress toward the target behaviour or outcome, then I will reward myself with Y reward."
- **Penalty** - The opposite of a reward. Something undesirable that is given (or received) after a lack of effort or failing to perform the target behaviour.
 - This can be adding something disliked or removing something liked.
- **Disincentive** - The opposite of an incentive. A plan of the conditions under which you will penalise yourself in a specific way.

Stable vs unstable factors

- **Stable factor:** Any relatively permanent (slow to change) factor that can contribute to outcomes
 - Examples of stable factors: personality, gender, age, disability
- **Unstable factor:** Any temporary (readily changeable) factor that can contribute to outcomes
 - Examples of unstable factors: weather, mood, social surroundings

Stigma, Stereotyping and Prejudice

- **Ingroup:** Any social group which you personally identify being a member of.
- **Outgroup:** Any social group which you do not identify yourself as a member.
- **Stereotyping:** Viewing a group of people in an oversimplified (usually negative) way.
- **Prejudice:** Having a negative judgment of a group of people without much evidence to support that judgment.

Stimulus and Response

- **Stimulus:** Any event, occurrence or piece of information that could potentially trigger an action.
- **Response:** Any action (or set of actions) triggered by a stimulus.
- **Aversive:** Unpleasant.

Training Executive Function

- **Training tools** can be found at the websites below. Each of these websites or apps may also contain other techniques:
 - Healthy eating: <https://www.exeter.ac.uk/foodt/>
 - Alcohol reduction: <http://drinklessalcohol.com/>
 - Note: These training tools and apps were created by 3rd parties, and the developers of this listing take no responsibility for their contents.

Contact information: Questions about this compendium?

Send an email to Keegan Knittle (keegan.knittle@helsinki.fi)

The self-enactable techniques

#1 - Agenda mapping

Definition: Identify behaviours that you could consider changing

Example: Considering ways in which your life could be better can help you identify things you might want to change. Think about which behaviours you might consider changing in the future. This could be new behaviours that you might consider starting. Or it could be behaviours that you currently do and might consider stopping. Identifying these behaviours will give you an overview of the change options you could pursue.

Notes: Takes place before behavioural domain is chosen

Requires external inputs: No

#2 - Brainstorm options

Definition: Generate a menu of options for the target behaviour without initially critiquing them

Example: It's good to have a lot of options of how you could change your behaviour. If trying to become physically active, list as many different possibilities as you can think of. For example, going to the gym, cycling to work, playing sports, or taking short walks. When making the list, include everything that comes to mind. Do not judge the possibilities you come up with. Add to your list by asking friends or family how they might increase their physical activity.

Notes: **Requires external inputs:** No

Prerequisites: Agenda mapping (1)

#3 - Consider behaviour change options

Definition: Consider and explore available options for engaging in the target behaviour

Example: There are many different ways to change a behaviour. If trying to become more physically active, you could take walks during your lunch break for example. Or, you could join a gym or sports team, cycle to work instead of driving, or do yoga. Assess how these different options would affect your health, relationships, enjoyment, or finances. Then, choose the one you think is best. Choosing the options that are right for you can help you get started and keep going.

Notes: **Requires external inputs:** No

Prerequisites: Brainstorm options (2)

#4 - Hypothetical thinking

Definition: Think hypothetically about how you might achieve behavioural changes

Example: There are many different possibilities for how you might change your behaviour. If you know which behaviour you wish to change, consider the different possibilities for changing it. Then, think about how you might go about achieving each of these changes. For example, if you want to increase your physical activity, how would you do it in practice? Would you go to the gym or go jogging, and how would you do each of these? If considering changing your diet, what are your options and how could you make them a reality? Would you follow a low calorie diet, the mediterranean diet, or something else?

Notes: **Requires external inputs:** No

Prerequisites: Agenda mapping (1)

#5 - Behavioural goal setting

Definition: Set a goal defined in terms of the target behaviour

Example: Having a clear goal can help you direct your behaviour. Set a physical activity goal that you will pursue in a specified period (e.g. tomorrow, this week). This should include an amount (e.g. minutes or steps) or level of the activities you will undertake. Ideally, this goal should be realistic in light of how active you are normally.

Notes: Requires external inputs: No

Possible adverse effects: Failure to achieve goals can reduce feelings of competence and lead to disappointment

#6 - Outcome goal setting

Definition: Set a goal defined in terms of a positive outcome of the target behaviour

Example: Setting goals about outcomes you want to achieve can help you to guide your behaviour. Identify a goal that that you would like to achieve by becoming more physically active. This could be losing weight, improving your mood, feeling fit or anything else. This outcome goal should ideally be personally important, inspiring, realistic, and somewhat challenging.

Notes: Requires external inputs: No

Possible adverse effects: Failure to achieve goals can reduce feelings of competence and lead to disappointment

#7 - Problem Solving

Definition: Analyze factors influencing the behaviour and generate or select strategies to overcome barriers to performing the behaviour

Example: Having a plan can help you overcome barriers to changing behaviour. First, identify things that could keep you from being active (e.g. lack of time, tiredness, other responsibilities). Then, identify ways you could overcome these barriers to still be active. For example, "IF I am too busy to go for a walk, THEN I will be physically active while doing other things (e.g. do exercises at my desk while reading). Solving problems in this IF-THEN way can help you to increase your physical activity.

Notes: Requires external inputs: No

#8 - Action planning

Definition: Plan performance of behaviour in detail, including context, frequency, duration and/or intensity

Example: Clearly specifying the behaviour you want to undertake can help you to take action. Make a detailed plan of where, how and how often you will be physically active. For example, plan to go to an exercise class in the gym nearby every Tuesday after work. You can write this down on a piece of paper or enter into your (electronic) agenda or calendar.

Notes: Flexibly adjust and adapt your plans as other opportunities arise.

Requires external inputs: No

#9 - Review behavioural goal(s)

Definition: Review behavioural goal(s) and consider modifying in light of achievement

Example: It can help to periodically review health behaviour goals, to make sure that they are still right for you. If you have had difficulty achieving a current goal (e.g. take a 15 minute walk every day), adjust it to make it a little easier (e.g. take a 10 minute walk every day). If you have achieved your current goal, make it a little more difficult or decide to pursue the same goal again. Keeping goals realistic in light of your current behaviour is a good strategy to stay motivated.

Notes: This may lead to re-setting the same goal, a small change in that goal or setting a new goal instead of (or in addition to) the first. Consider using self-kindness (115) or acceptance (116) in the case of non-achieved goals.

Requires external inputs: No

Prerequisites: Behavioural goal setting (5)

#10 - Review outcome goal(s)

Definition: Review outcome goal(s) and consider modifying goal(s) in light of achievement

Example: It can sometimes be helpful to readjust your outcome goals. For example, if you had set a goal to lose 5 kg this year, but you had only lost 2 kg by October, you might consider changing your goal to losing 3 kg this year. Or, if you had already lost 5 kg by October, you might readjust your goal to lose 6 kg by the end of the year. Reviewing your goals might also show that you are on track, and that your goals do not need alteration.

Notes: This may lead to resetting the same goal, a small change in that goal or setting a new goal instead of, or in addition to the first. Consider using self-kindness (115) or acceptance (116) in the case of non-achieved goals.

Requires external inputs: No

Prerequisites: Outcome goal setting (6)

#11 - Discrepancy between current behaviour and goal

Definition: Identify discrepancies between your current behaviour and your previously set outcome goals, behavioural goals or action plans

Example: When you have a goal or a plan, comparing it to where you are now can give you a clear idea of what steps to take next. To do this, identify ways in which your behaviour has not matched up with your goals. For example, you could compare your current physical activity with the physical activity target you had set for yourself. This will help you to see what extra efforts you might need to take.

Notes: Goes beyond self-monitoring of behaviour (17), in that current behaviour is compared to the set goal, and the discrepancy is the focus.

Requires external inputs: No

Prerequisites: Behavioural goal setting (5), Outcome goal setting (6) or Action planning (8)

#12 - Self-commitment

Definition: Pledge or promise yourself to perform the target behaviour

Example: Wanting to change a behaviour is one thing, but really committing to it is another. If trying to become more physically active, make a commitment to yourself to do so. Use the words 'I will...' followed by the actions you will take toward being physically active. For example, commit to being physically active by saying 'I will complete this exercise class'.

Notes: **Requires external inputs:** No

#13 - Public commitment

Definition: Make a commitment to performing the target behaviour and inform others about it

Example: Knowing that others are aware of your commitments can increase accountability and help you stick to them. Make a public commitment, such as announcing "I will go to the gym twice next week" on social media or in the company of friends or relatives. Making your aims known to others can help you to stick to them.

Notes: Same as self-commitment (12), but with the public element added.

Requires external inputs: Yes

#14 - Make a behavioural contract

Definition: Create a written specification of the behaviour to be performed, and have it witnessed by another person

Example: Agreeing in writing to a behaviour change you want to achieve can help you get started. First, write down the behaviour you are going to perform, for example "Do physical activity 2 days a week starting next week". Then, ask a friend, relative or colleague to sign the contract with you. This accountability can keep you headed in the right direction.

Notes: **Requires external inputs:** Yes

Prerequisites: Behavioural goal setting (5)

#15 - Obtain feedback on behaviour

Definition: Obtain informative or evaluative feedback on how well, how frequently or how intensively you perform the behaviour

Example: Getting feedback on your behaviour can help you to know how you are doing and how you could improve. For example, you could have another person assess your form when being physically active. Or, you could compare your current fruit and vegetable intake to published guidelines, to your own goal, or to how much you have eaten them in the past.

Notes: **Requires external inputs:** Yes

#16 - Obtain feedback on outcome(s) of behaviour

Definition: Obtain informative or evaluative feedback on the outcomes of performing the behaviour

Example: Getting feedback on outcomes of your behaviour can help you to see how much progress you have made. It can also help you to set new goals going forward. For example, you could observe how your weight or fitness levels have changed over time. You could also ask a health professional for feedback on how your cholesterol levels compare to published guidelines.

Notes: **Requires external inputs:** Yes

#17 - Self-monitoring of behaviour

Definition: Monitor and record your own behaviour

Example: Knowing how active you are can help you to decide whether more physical activity would be right for you. Keep track of how active you are each day, either on paper or using an electronic diary. You could also use a smartphone app or a pedometer to keep track of your steps or activity levels.

Notes: **Requires external inputs:** No

#18 - Self-monitoring outcome(s) of behaviour

Definition: Monitor and record outcomes of your own behaviour

Example: Keeping track of the outcomes of a behaviour can help you to see its effects. For example, if you are exercising, keep track of the impact of exercise on your fitness levels. If you have set an outcome goal (e.g. to lose weight), you could weigh yourself daily and keep track of your progress towards the weight loss goal.

Notes: Requires external inputs: No

#19 - Monitoring of emotional consequences

Definition: Assess feelings after attempts at performing the target behaviour

Example: Knowing how a behaviour makes you feel is a valuable part of knowing whether it makes sense to keep going with it. After being active, assess how physical activity affects your feelings and emotions. You could also assess your feelings and emotions after periods of physical inactivity. These observations might help you decide about the level of physical activity that is best for you.

Notes: Requires external inputs: No

#20 - Self-monitoring of motivation

Definition: Monitor and record the quality and/or quantity of your own motivation for the target behaviour

Example: Keeping track of how motivated you are can help you to see if you should take steps to increase your motivation for a behaviour. For example, you could use a scale of 1-10 to rate how motivated you are to change or maintain a healthy diet over time. This may help you identify drivers for shifts in motivation. Having high amounts of motivation is ideal for keeping a new behaviour going.

Notes: Requires external inputs: No

#21 - Biofeedback

Definition: Use an external monitoring device to obtain feedback about the body (e.g. physiological or biochemical state)

Example: Knowing the state of your body can help you to recognize how behaviour affects it. For example, you could use a blood pressure monitor to track your blood pressure. You could also use a heart-rate variability sensor to get feedback on your stress levels. Biofeedback devices can help you increase awareness of your bodily states.

Notes: Requires external inputs: Yes

#22 - Body Changes

Definition: Alter body structure or functioning, or add supports to directly facilitate the target behaviour

Example: Aspects of your physical body can help or hinder behaviour change. So, changing your physical body can help change your motivation or behaviour. For example, if trying to be more active, you could first increase your muscle mass and improve your aerobic fitness. This would make it easier for you to start a new sport. If trying to sleep better, you could learn how to deeply relax, which could help to prepare your body for sleep.

Notes: Requires external inputs: No

#23 - Pharmacological support

Definition: Use drugs or substances to facilitate performance of the target behaviour

Example: Medications and nutritional supplements can sometimes help to change or maintain behaviours. However, check with your doctor before using any new medications or supplements. If given the all clear, use caffeine to boost your energy and focus levels for physical activity. Or, use nicotine replacement products (e.g. gums or patches) to help you stop smoking.

Notes: Requires external inputs: Yes

Possible adverse effects: Substance related side effects. Possible addiction.

#24 - Adding objects to the environment

Definition: Add or acquire equipment or objects that facilitate performance of the target behaviour

Example: When trying to change behaviour, having the right equipment can make performing the new behaviour easier. For example, if trying to become more physically active, you could buy or borrow some sports gear. A basketball, some weights, or a yoga mat could help you to take up a new physical activity. If trying to practice safe sex, you could get some free condoms from a birth control clinic and put them by your bed so that they are more accessible.

Notes: Requires external inputs: No

#25 - Restructuring the physical environment

Definition: Change the physical environment in order to facilitate performance of the target behaviour or create barriers to the unwanted behaviour

Example: Your surroundings can help or hinder your efforts to change or manage your behaviour. Change something in your physical environment to make the wanted behaviour easier. For example, if aiming to start running, keep your jogging gear in the same place near the door so that it is there when you need it. If trying to cut down on snacks, limit the availability of snacks by keeping them out of sight or in a locked cabinet.

Notes: Requires external inputs: No

#26 - Restructuring the social environment

Definition: Change your social surroundings to facilitate performance of the target behaviour or create barriers to the unwanted behaviour

Example: Changes in your social environment can help you to change or manage your behaviour. If trying to become more physically active, you could set up a walking competition with your friends, family or co-workers. Or, you could spend more time with physically active friends. If you are trying to cut back on drinking alcohol, you could avoid spending time with friends who drink a lot.

Notes: Requires external inputs: Yes

#27 - Remove access to rewards for unwanted behaviour

Definition: Distance yourself from situations which reward unwanted behaviours

Example: Some unwanted behaviours are hard to stop because doing them results in a reward (e.g., positive social interactions). Removing access to such rewards can help you to change such behaviours. For example, if trying to stop smoking, avoid going to smoke with colleagues. This way, you can to avoid their pleasant company (i.e., a social reward) while smoking. Or if trying to get more sleep, put your phone and computer aside in the evening. This will help you avoid getting lured in by the rewards of social media or TV shows which cause you to stay up late.

Notes: Requires external inputs: No

#28 - Escape learning

Definition: Put in place aversive stimuli, the removal of which will facilitate behaviour change

Example: A desire to avoid unwanted or uncomfortable situations can be a powerful motivator for action. If you are trying to become physically active, turn up the temperature in your house until escaping outside to go for a walk is a welcome change. You could also ask your children to start making a lot of noise, so that stepping outside for a jog is a nice escape as well.

Notes: Requires external inputs: No

#29 - Task crafting (enjoyment)

Definition: Restructure the target behaviour to make performing it more enjoyable

Example: Behaviours are more likely to be maintained when they are enjoyable. If trying to become more physically active, make it more fun by listening to music or watching TV while you do it. You could also try to turn physical activity into a game, or consider being active outdoors when the weather is nice.

Notes: Requires external inputs: No

#30 - Task crafting (skills and ability)

Definition: Introduce new approaches to the target behaviour, that are congruent with current skills and ability

Example: Attempting behaviours that are too easy or too difficult can lead to boredom or frustration, respectively. For example, if going to the gym, make sure you choose weights that are not too heavy or too light. Or, if starting a running program, begin with a distance that presents the right amount of challenge. This will help to keep you engaged with your new physical activity.

Notes: Requires external inputs: No

#31 - Add challenge

Definition: Add challenges to the target behaviour

Example: Doing the same activity over and over can become boring and too easy. To avoid this, take steps to make physical activity more challenging. You could for example, increase the intensity of the physical activity exercise. You could also introduce barriers to increase the difficulty level of the activity. For example, you could increase the weight you use during gym exercises.

Notes: Requires external inputs: No

#32 - Goal integration

Definition: Modify (or choose ways of doing) the behaviour such that it allows for simultaneously engaging in other valued behaviours and/or pursuing valued outcomes

Example: It is sometimes possible to combine a new behaviour with other valued activities. For example, if spending time with family is important to you, combine family time with physical activity by going for a walk together. You could also try walking or cycling during your morning commute. This way, physical activities are part of what you would already be doing anyway.

Notes: Choose ways of doing the behaviour that are congruent with other valued behaviours and goals in your life.

Requires external inputs: No

#33 - Behavioural experiments

Definition: Identify and test hypotheses about the behaviour, its causes and consequences, by collecting and interpreting data about such experiences

Example: Experiments can help you to figure out how a new behaviour works for you. For example, if you aren't sure whether you enjoy physical activity more in the mornings or in the evenings, set up an experiment to test this. For one week, try exercising in the mornings before work. Then, try exercising after work in the next week. Write down your thoughts and experiences of each period, and then compare these to identify the best way forward.

Notes: Requires external inputs: No

#34 - Obtain information about antecedents

Definition: Obtain information about things that often precede performance of the behaviour (e.g. social and environmental situations, events, emotions, cognitions)

Example: Knowing what leads to unwanted health behaviours can help you to identify risky situations. To do this, keep a log of the situations or feelings that occur before a behaviour (e.g. eating an unhealthy snack). Each time you snack, write down the emotions, thoughts and situations that led you to snacking. Identifying how social situations, events, thoughts and emotions shape our behaviour can help keep us on the right track.

Notes: Requires external inputs: No

#35 - Obtain information about health consequences

Definition: Obtain (or remind yourself of) information about health consequences of performing the target behaviour

Example: Increasing your knowledge of what a behaviour leads to may help you in being able to carry it out. If trying to become more physically active, seek out information on the negative health consequences of inactivity. Or, look for positive consequences of activity. You could get information about consequences by searching for it online or asking your doctor. When possible, try to ensure that the information you find is credible and accurate.

Notes: This may involve information about how behavioural change will affect others as well as the individual. Source may be (e.g. written, verbal, visual)

Requires external inputs: Potentially

#36 - Obtain information about social and environmental consequences

Definition: Obtain (or remind yourself of) information about social and environmental consequences of performing the target behaviour

Example: Knowing how behaviours affect the environment or your social situations can help motivate you to change. For example, if you were trying to drink less alcohol, you could calculate how much money you would save if you did not consume alcohol. You might also remind yourself of how binge drinking might harm your relationships with friends or family.

Notes: Source may be (e.g. written, verbal, visual); consequences can be for any individual, not just the one receiving the intervention.

Requires external inputs: Potentially

#37 - Obtain information about emotional consequences

Definition: Obtain (or remind yourself of) information about emotional consequences of performing the target behaviour

Example: Knowing how behaviours might affect your state of mind (e.g. emotions, feelings, mood) can help keep you on track. For example, if trying to become more physically active, search online to learn about the emotional benefits of physical activity. Or, ask physically active friends or family members how it makes them feel. You could also think about how you yourself have felt after being active, and about how it would feel if you stopped being active.

Notes: Consequences can be for any individual, not just the one receiving the intervention. Source may be (e.g. written, verbal, visual)

Requires external inputs: Potentially

#38 - Obtain information about others' approval

Definition: Obtain (or remind yourself of) information about what other people think of the target behaviour

Example: Sometimes it helps to know what others think about plans to change your behaviour. When considering becoming more active, ask your friends and family what they think of the idea. You could also remind yourself of what your family or friends think later on to help you decide whether to become more active.

Notes: **Requires external inputs:** Yes

#39 - Credible source

Definition: Watch or listen to a credible source argue in favor of or against the target behaviour

Example: Sometimes hearing from experts can help you be more convinced about how to behave. If thinking about becoming more active, listen to a famous athlete talk about the benefits of exercise. Or, read a pamphlet from the health department about the dangers of sedentary behaviour. Credible and trustworthy information from experts can help you decide what is right for you.

Notes: **Requires external inputs:** Yes

#40 - Make consequences more memorable

Definition: Emphasize the consequences of performing the behaviour to make them more memorable

Example: Emphasizing the consequences of a behaviour can make them more memorable. The more memorable the consequences, the more they will impact your efforts to change behaviour. If you are looking to be more physically active, find a graphic picture that shows how sedentary time can harm your body. Or, hang up a memorable poster which shows how physical activity gives you energy and lets you spend time with others. Things like this can make the consequences of behaviour easier to remember.

Notes: **Requires external inputs:** No

Prerequisites: Some "Obtain information..." technique (35, 36, or 37)

#41 - Memory aids

Definition: Use techniques to improve recall of information related to carrying out the target behaviour

Example: When starting a new behaviour, it is not always easy to remember what to do. Use checklists, quick reference guides or acronyms to help you remember how to be physically active. Keep these memory aids on hand for the situations when you would need them most.

Notes: **Requires external inputs:** No

#42 - Contrast/compare pros and cons

Definition: Identify and compare reasons for wanting and not wanting to engage in the target behaviour

Example: Every (new) behaviour has its pros and cons, and sometimes comparing these can be a valuable step when considering a change in behaviour. Make a list of all of the pros and cons of becoming more physically active. Then, weigh the importance of each to help you decide whether the pros of physical activity outweigh the cons. This will help you to make an informed decision.

Notes: Requires external inputs: No

#43 - Comparative imagining of future outcomes

Definition: Imagine and compare outcomes of changed versus unchanged behaviour

Example: When considering changing a health behaviour, it can be useful to compare what would happen if you did change to what would happen if you did not change. For example, if you are trying to quit smoking, how would your health, finances or social relationships look in the future if you stopped smoking now? How will these things be if you do not stop smoking? Comparing these possible future outcomes can help you decide which behavioural path would be best for you.

Notes: Requires external inputs: No

#44 - Empathy training

Definition: Empathize with another person who might be affected by your behaviour

Example: Our behaviours can affect how other people feel. If you are trying to stop smoking or drinking, think of someone important to you and imagine how your smoking or drinking makes them feel now. Then think about how they would feel if you stopped. This empathy training can help you understand how your behaviour affects other people.

Notes: Requires external inputs: Potentially

#45 - Anticipated regret

Definition: Become aware of and/or reflect on expectations of future regret if you do not perform the target behaviour

Example: The fear of missing out can be a powerful motivator. If you are trying to reduce your alcohol consumption, think about the things you might regret if you did not. For example, how would you feel if you ended up with liver disease and could no longer do many things you enjoy? Or, if you are trying to be more physically active, think about how you would regret it if your 'couch potato' lifestyle meant that you could not keep up with your children or grandchildren. Thinking about things you might regret in the future can help keep your behaviour on the right track.

Notes: Requires external inputs: No

#46 - Observe demonstration of the behaviour

Definition: Observe someone else perform or model the behaviour, either in person or via videos or images, as something to aspire to or imitate

Example: Seeing others perform a behaviour can inspire, encourage, or teach you new skills. You could watch videos of athletes performing at a high level as something that you could aspire to. Or, observe how people with healthy diets do their grocery shopping or prepare healthy meals. These observations can help you identify how to make desirable changes in your own life.

Notes: Requires external inputs: Yes

#47 - Vicarious consequences

Definition: Observe the consequences for others when they (fail to) perform the target behaviour

Example: Seeing how a behaviour affects other people when they perform it can help you know what to expect. If trying to eat smaller portions, observe how eating very large portions makes some people feel bloated or ill afterward. Or, observe how being more active has helped a friend or family member feel proud and healthy. Observing the consequences for others can impact your motivation to perform a behaviour.

Notes: Requires external inputs: Yes

#48 - Social comparison

Definition: Compare what you do to what others do in relation to the target behaviour

Example: Comparing your behaviour with that of others can help to guide and motivate your efforts. If trying to be more physically active, compare yourself to a very active person to view them as a role model or guide. Or, compare yourself to someone who is less active and use this as a confidence booster. A good mix of these 'upward' and 'downward' comparisons can help keep you balanced.

Notes: Requires external inputs: Potentially

#49 - Avoid stereotyping and prejudice

Definition: Consciously control impulses to avoid stereotyping and prejudice against outgroups

Example: Staying in control of stereotypes and keeping an open mind can help you to change your behaviour. If trying to stop smoking or drinking, avoid stereotyping or prejudice against people who do not smoke or drink. Do not view non-smokers or non-drinkers as somehow 'different' from yourself. Instead, try to think positively about them.

Notes: Requires external inputs: No

#50 - Personal contact with the outgroup

Definition: Socialize with members of the outgroup related to target behaviour

Example: Stereotypes about people who behave in a certain way can make us not want to do that behaviour ourselves. Breaking these stereotypes through social contact can help to change behaviour. For example, you are trying to drink less alcohol, but you do not like people who do not drink alcohol (e.g. "they are boring"). Then, make social contacts with people who do not drink alcohol. Spending time with these persons might reveal that they are more like you (and less boring) than you thought.

Notes: Requires external inputs: Yes

#51 - Stereotype-inconsistent information

Definition: Identify positive examples from the outgroup related to target behaviour

Example: Holding a negative view of people who behave in a particular way can make us not want to do that behaviour ourselves. Identify positive examples of people who do the behaviour you would like to do. For example, you are trying to drink less alcohol, but you think badly of people who do not drink alcohol (e.g. "they are boring"). In this case, find someone who does not drink alcohol, but whom you view positively. Finding such examples can help you realise that 'those people' are not all bad.

Notes: Requires external inputs: Yes

#52 - Support others

Definition: Provide support to others in relation to the target behaviour

Example: Sometimes helping others to be physically active can help you to be active, too. Support a friend or family member to become more active. For example, help them to overcome problems they have trying to be active (e.g. not motivated or finds being active alone boring). This can help you to overcome your own problems in being physically active. Or, try being active with them, which would help you get active at the same time.

Notes: Requires external inputs: Yes

#53 - Identification of self as role model

Definition: Recognize (or remind yourself) that you can be a role-model whose behaviour may serve as an example to others

Example: Recognizing that others might copy our behaviour can sometimes help us to behave better. To do this, tell yourself that being physically active sets a good example for your children. Or, think about how your hard work toward being physically active might inspire others. Seeing ourselves as role models can help us to behave responsibly.

Notes: Requires external inputs: Potentially

#54 - Obtain practical social support

Definition: Obtain practical help for performance of the behaviour

Example: Friends, relatives, colleagues and other 'buddies' can offer practical help to support your behaviour. For example, have a friend remind you about your physical activity goals. Or, have them take over some of your responsibilities to give you more time for physical activity.

Notes: Requires external inputs: Yes

#55 - Obtain emotional social support

Definition: Obtain emotional social support for performance of the behaviour

Example: Friends, relatives, colleagues and other 'buddies' can offer emotional support for your behaviour. For example, have a family member encourage you to achieve your physical activity goals. Or, talk to a friend to help you feel better when setbacks arise.

Notes: Requires external inputs: Yes

#56 - Obtain instruction on how to perform the behaviour

Definition: Obtain instruction to learn how to perform the behaviour

Example: Undertaking a new behaviour can be easier if you learn the proper way to do it. Have another person teach you the best ways to be physically active, or how to improve your technique. For example, consult a trainer at the gym to learn how to perform different exercises correctly.

Notes: Requires external inputs: Yes

#57 - Remind of outcome goal content

Definition: Remind yourself of your outcome goal(s)

Example: Reminding yourself of what you aim to gain from a behaviour can help keep you going. Do this by focusing on these desired outcomes. For example, if trying to be active, think about your goal of being healthy or of achieving other important outcomes.

Notes: Requires external inputs: No

Prerequisites: Outcome goal setting (6)

#58 - Action control (keep goals in mind)

Definition: Make efforts to consciously keep the target behaviour and your goals in mind

Example: Keeping your attention focused on your goals can help keep you going. When trying to become more active, do this in the moment by focusing your attention on achieving your physical activity goal. Also, tune out any distracting information. You could also remind yourself of your physical activity goal at any time, to keep it in mind throughout the day. This mental exercise can help you achieve your goals.

Notes: Requires external inputs: No

Prerequisites: Behavioural goal setting (5)

#59 - Action control (maximize effort)

Definition: Maximize effort toward undertaking the target behaviour

Example: Changing behaviour requires focus. If trying to become more physically active, maximize your efforts toward achieving this goal. Keep your attention focused on it as much as possible. When feeling low on energy, challenge yourself to put in a good effort and get started with the activity anyway.

Notes: Requires external inputs: No

#60 - Prompts/cues

Definition: Introduce environmental or social prompts, cues and reminders to undertake the target behaviour

Example: Reminders can sometimes help to shape behaviour. If trying to be physically active, place a note at the door that reminds you to cycle to work, or set an alarm to ring when it's time for your evening walk. You could also ask a coworker to remind you to go for a brief walk after lunch. Small reminders like these can help you to direct your behaviour.

Notes: Set up the prompt or cue at the time or place you would normally perform the target behaviour.

Requires external inputs: No

#61 - Reduce prompts/cues

Definition: Gradually withdraw prompts, cues or reminders to perform the target behaviour

Example: Reminders can help to shape behaviour, but you might not need them after some time. For example, if you have used daily prompts or cues as reminders to be physically active, gradually reduce (or stop) your use of these. Remove notes on doors or alarms that you used to use to signal that it was time for exercise. This can help you be active on your own, without prompts or reminders.

Notes: Requires external inputs: No

Prerequisites: Prompts/cues (60)

#62 - Avoid cues for the unwanted behaviour

Definition: Avoid exposure to social, contextual or physical cues for the behaviour, including changing daily or weekly routines

Example: Sometimes certain situations can lead us to behave in unwanted ways. If trying to become more physically active, avoid turning on the TV, as this is a clear cue to be inactive. Or if you want to eat less candy, avoid the cookie and candy aisles in the grocery store.

Notes: Requires external inputs: No

#63 - Distraction

Definition: Use an alternative focus for attention to avoid triggers for unwanted behaviour

Example: What we pay attention to can sometimes lead to unwanted behaviour. When being physically active, distract yourself from negative things like feeling sweaty, tired or bored. Instead, focus on positive things, like birds singing, your plans for the weekend, or the last movie you saw. These distraction techniques can help keep you going through difficult times.

Notes: Use this technique to avoid triggers for unwanted behaviour, and not to avoid other problems.

Requires external inputs: No

#64 - Conserving mental resources

Definition: Minimize demands on mental resources to facilitate performance of the target behaviour

Example: Removing distractions and having a clear head can help you focus on a new behaviour. If you wanted to eat more healthily, block social networking sites/apps or turn off the TV. This will remove distractions and help you focus on preparing a healthy meal. Or, store healthy recipes on your phone to have them at hand when doing your shopping. If you wanted to become more physically active, take a break or short nap to replenish your mental resources. This can give you some extra energy for being physically active.

Notes: **Requires external inputs:** No

#65 - Satiation with target behaviour

Definition: Engage in some form of the unwanted behaviour with the aim of reducing motivation to engage in that behaviour

Example: Sometimes over-doing unwanted behaviours can help you better engage in wanted behaviours. For example, if trying to be more physically active, move as little as you can for a full day. Then, being physically active will feel like a nice break from being sedentary.

Notes: Not necessarily recommended for all health behaviours, as overdoing it can have adverse effects.

Requires external inputs: No

Possible adverse effects: Use caution with this technique. For many health behaviours, 'overdoing it' can be very harmful to your health. Only use this technique for limited periods of time, and consult a professional if you are uncertain of the risks associated with using it.

#66 - Satiation with a stimulus

Definition: Repeat exposure to a stimulus to reduce motivation for the unwanted behaviour

Example: Sometimes cues (e.g. walking past a sweet-smelling bakery) get linked with unwanted automatic behaviours (e.g. going in and eating a piece of cake). Breaking these stimulus-behaviour links can help you change your behaviour. If trying to stop eating sweets, spend time near the bakery until you become "fed up" with the smell. Then, walking past will no longer cause you to want to go in and eat a piece of cake. You thereby "sate" yourself with this stimulus and break the stimulus-behaviour link.

Notes: **Requires external inputs:** No

#67 - Behaviour substitution

Definition: Substitute an unwanted behaviour with a wanted or neutral behaviour

Example: You can think of behaviour change as replacing one behaviour with another. For example, instead of watching TV on the couch, one could watch TV while walking in place. You could also walk or take a bicycle for part of each journey, instead of public transport or a car. Or, substitute sugary snacks with something healthier like baby carrots.

Notes: **Requires external inputs:** No

#68 - Reframing perspective on behaviour

Definition: Deliberately adopt a new perspective on behaviour (e.g. its purpose) in order to change cognitions or emotions about performing the behaviour

Example: Looking at the same behaviour from a different angle can sometimes help us to change. For example, instead of focusing only on increasing a new behaviour, think about reducing an old one. If you want to become more physically active, do not think about increasing physical activity. Instead, think about decreasing the time you spend sitting or lying down. Taking this new angle on behaviour can help you feel more comfortable and motivated to do it.

Notes: Requires external inputs: No

#69 - Behavioural practice or rehearsal

Definition: Practice or rehearse the performance of the behaviour in a context or at a time when the performance may not be necessary, in order to increase skill

Example: Practice makes perfect when trying to become more physically active. For example, if you wanted to take up cycling, you could ride around your block a few times to get the hang of it before going on a longer ride. You could also practice doing sit-ups at home before going to the gym.

Notes: Requires external inputs: No

#70 - Habit formation

Definition: Rehearse and repeat the behaviour in the same context repeatedly so that the context automatically elicits the behaviour

Example: Establishing a routine can help keep you change your behaviour. If you are trying to become more physically active, being active at the same place, day and time each week can help it to become a habit. The key is to always repeat the behaviour when encountering the same situation. This pattern will soon become automatic, and you will be active every week at that time without having to think about it.

Notes: Requires external inputs: No

Prerequisites: Behavioural practice or rehearsal (69)

#71 - Habit reversal

Definition: Rehearse and repeat an alternative behaviour to replace an unwanted habitual behaviour

Example: To reverse an old habit, one can build a new habit in its place. In situations where you would normally choose an inactive behaviour, choose an active one instead every time. Instead of taking the elevator, you could take the stairs each time. Or, cycle to work, instead of taking public transportation or the car. Repeat this choice several times to reverse your old habits.

Notes: Requires external inputs: No

Prerequisites: Behaviour substitution (67)

#72 - Overcorrection

Definition: Repeat the wanted behaviour in an exaggerated way following an unwanted behaviour

Example: It is important to get back on track after a relapse in behaviour. If you had aimed to walk or cycle every day, but missed a day in your routine, overcorrect for this by going for an extra long walk the next day. Or, if you had aimed to limit yourself to one snack per day, but then had two on one day, you could overcorrect by going two full days without any snacks.

Notes: Requires external inputs: No

#73 - Generalization of target behaviour

Definition: Perform the wanted behaviour, which is already performed in a particular situation, in another situation

Example: Behaviours that you do in one situation can also be done in other situations. If you usually ride an exercise bike at the gym, begin cycling outdoors as well. Or, if you normally take walks on the weekends, extend this to taking walks during weekdays. Generalizing your behaviour to other situations can help you to become more active.

Notes: Requires external inputs: No

#74 - Graded tasks

Definition: Set easy-to-perform, graded tasks making them increasingly difficult, but achievable, until target behaviour is performed

Example: Breaking a behaviour down into smaller parts can help you to achieve it. For example, if you want to be physically active on 3 days per week, start with being active 1 day per week one week. Then, go for 2 the next week, and 3 in the week after that. Or, if you wanted to take 10000 steps every day, start first with 5000, then 6000, and so on.

Notes: Requires external inputs: No

Prerequisites: Behavioural goal setting (5)

#75 - Training executive function

Definition: Train mental control processes to help override automatic responses

Example: Automatic processes, like how we respond to cues in our environment, have a powerful impact on behaviour. Learning to control non-desirable automatic processes can help you keep behaviour on track. Use training software or apps that include Go/No-go, stop signal, or other similar tasks to increase your self-control. These tasks let you practice not responding to cues that lead to unwanted behaviours (e.g. smoking, unhealthy eating). They can also let you practice responding to cues that lead to wanted behaviours (e.g. physical activity, healthy eating).

Notes: See 'Training Executive Function' in the glossary for links to some training tools.

Requires external inputs: Potentially

#76 - Exposure

Definition: Confront a feared stimulus to reduce the fear response during later encounters

Example: Confronting fears and discomfort related to new behaviours can help us to change. For example, if you want to become more physically active but don't like to sweat or become out of breath, exercise just until you start to sweat or become out of breath. Then, experience these things to see that they might not be as bad as you thought. Facing these fears can help you to 'get over the hump' in changing your behaviour.

Notes: Requires external inputs: No

#77 - Associative learning

Definition: Repeatedly pair a neutral stimulus with a stimulus that already elicits the behaviour, until the neutral stimulus elicits that behaviour

Example: Building associations between a behaviour and a neutral stimulus can help you to change your behaviour. For example, if you want to be more physically active but don't like exercise, start by finding some music that you enjoy listening to (i.e. a neutral stimulus). Then, always listen to that music when you exercise. Over time, the association between exercise and enjoyment will strengthen. Listening to that enjoyable music will then make you want to be active.

Notes: Requires external inputs: No

#78 - Self-incentive (behaviour)

Definition: Plan to reward yourself in the future with money, vouchers, experiences or other valued objects if and only if you make sufficient efforts or progress in performing the behaviour

Example: Planning to reward yourself for making efforts toward a health behaviour can increase your motivation to keep going. For example, if trying to go to the gym 3 times in a week, plan to reward yourself with a new piece of clothing if you managed to go to the gym on at least 2 days. If trying to eat 5 servings of fruit or vegetables per day, plan to reward yourself by watching a movie if you eat at least 4 servings in a day. Before you start pursuing the behaviour, decide how much progress would deserve a reward. Then, only reward yourself if you meet that target.

Notes: Incentive must be set up BEFORE engaging in behaviour.

Requires external inputs: No

Prerequisites: Behavioural goal setting (5)

#79 - Incentivized self-praise (behaviour)

Definition: Plan to reward yourself in future with a verbal reward if and only if you make sufficient efforts or progress in performing the behaviour

Example: Planning to reward yourself for making future efforts toward a health behaviour can increase your motivation to keep going. For example, if trying to go for a jog 3 times in a week, plan to tell yourself "Great job!" if you managed to go for a jog at least 2 days in a week. If trying to eat 5 servings of fruit or vegetables per day, plan to tell yourself "Way to go!" if you eat at least 4 servings in a day. Before you start pursuing the behaviour, decide how much progress would deserve a reward. Then, only reward yourself if you later meet that target.

Notes: Incentive must be set up BEFORE engaging in behaviour.

Requires external inputs: No

Prerequisites: Behavioural goal setting (5)

#80 - Self-reward (behaviour)

Definition: Reward yourself with money, vouchers, experiences or other valued objects if and only if you have made effort or progress in performing the behaviour

Example: Rewarding yourself for effort or progress in performing a behaviour can motivate you to keep going. For example, if you ate a healthy snack instead of chocolate, buy yourself tickets to a concert. If you achieved a physical activity goal, treat yourself to some ice cream to celebrate.

Notes: Takes place AFTER engaging in behaviour, potentially in response to a self-incentive.

Requires external inputs: No

#81 - Self-praise (behaviour)

Definition: Reward yourself with a verbal reward if and only if you have made effort or progress in performing the behaviour

Example: Giving yourself a pat on the back can help keep your behaviours on track. If you have made a good effort toward being physically active, tell yourself 'good job!' or literally pat yourself on the back as a way of congratulating yourself.

Notes: Takes place AFTER engaging in behaviour, potentially in response to a self-incentive.

Requires external inputs: No

#82 - Self-incentive (outcome)

Definition: Plan to reward yourself in future with money, vouchers, experiences or other valued objects if and only if you make sufficient efforts or progress toward achieving a desired outcome of the behaviour

Example: Having a system to reward yourself for achieving outcomes can help to guide your behaviour. Plan to reward yourself with something nice if you achieve or make progress toward outcomes that are important for you. For example, tell yourself that if you manage to lose 2kg, that you will have a picnic with friends to celebrate.

Notes: Incentive must be set up BEFORE engaging in behaviour.

Requires external inputs: No

Prerequisites: Outcome goal setting (6)

#83 - Incentivized self-praise (outcome)

Definition: Plan to reward yourself in future with a verbal reward if and only if you make sufficient efforts or progress toward achieving a desired outcome of the behaviour

Example: Setting up a system to reward yourself for achieving desired outcomes can help to guide your behaviour. For example, if you are trying to lose 10 kg weight, plan to tell yourself "Great job!" if you have managed to achieve this goal or made progress towards it (e.g. lost 5kg). You could also plan to tell yourself "Great Job!" if you managed to complete your physical activity goal, as it would contribute to your goal of losing weight.

Notes: Incentive must be set up BEFORE engaging in behaviour.

Requires external inputs: No

Prerequisites: Outcome goal setting (6)

#84 - Self-reward (outcome)

Definition: Reward yourself with money, vouchers, experiences or other valued objects if and only if you have made efforts or progress toward achieving a desired outcome of the behaviour

Example: Rewarding yourself for achieving desired outcomes can help you stay motivated. For example, if you achieved your outcome goal of losing 5kg, reward yourself with new clothing or a nice meal with your family. You could also reward your self for making progress toward the goal if you had lost 2 kg for example.

Notes: Takes place AFTER engaging in behaviour and achieving the outcome, potentially in response to a self-incentive.

Requires external inputs: No

#85 - Self-praise (outcome)

Definition: Reward yourself with a verbal reward if and only if you have made efforts or progress toward achieving a desired outcome of the behaviour

Example: Rewarding yourself for achieving desired outcomes can help to keep your behaviour on track. For example, if you have lowered your blood pressure by eating a healthy diet, praise yourself or tell yourself 'good job'.

Notes: Takes place AFTER engaging in behaviour and achieving the outcome, potentially in response to a self-incentive.

Requires external inputs: No

#86 - Social reward

Definition: Obtain social acknowledgement from others for effort or progress toward the target behaviour

Example: Being rewarded for making progress feels good and can increase your motivation. Ask your family or friends to support you by acknowledging your efforts toward wanted behaviour in some way. The reward can be, for example, praise or a pat on the back.

Notes: Requires external inputs: Yes

#87 - Self-incentive based on situation

Definition: Identify specific situations in which you will reward yourself for performing the behaviour

Example: Identifying the specific circumstances under which you will reward yourself can help you direct your behaviour. For example, if you are trying to eat a healthy diet, make a plan to reward yourself for not eating unhealthy snacks when watching TV. Then, keep the planned reward in mind when you are watching TV and are tempted to reach for unhealthy snacks.

Notes: Requires external inputs: No

#88 - Self-incentive based on approximation

Definition: Plan to reward yourself each time you get closer to the target behaviour

Example: Rewarding yourself for making small steps toward a goal can help you to keep going. If you were trying to achieve a goal of running 5km without stopping, but can now only run 400m, plan to reward yourself if you are able to achieve 500m. Then reward yourself each time you improve on how far you can run, and get closer to being able to run 5km.

Notes: Requires external inputs: No

Prerequisites: Behavioural goal setting (5) and Graded tasks (74)

#89 - Self-incentive based on completion

Definition: Plan to reward the final component of a chain, then gradually reward components of the behaviour that occur earlier in the behavioural sequence

Example: Sometimes working backwards can help us to move forward. For example, if you are trying to eat more healthily, plan to reward yourself, working backwards through the actions that help you eat healthy meals. First, plan to reward yourself for eating a healthy meal prepared by someone else. Then, plan to reward yourself only if you buy and eat a ready-made healthy meal. Then, only reward yourself for eating a healthy meal you prepared yourself... And so on. Rewarding yourself for working backwards in this way can help you to build up the chain of behaviours needed to achieve your goals.

Notes: Requires external inputs: No

#90 - Self-incentive based on increased duration or frequency

Definition: Make rewards contingent on increasing duration or frequency of the target behaviour

Example: When trying to change behaviour, it sometimes helps to set up a system to reward yourself for achieving more than you did before. For example, if trying to become more physically active, plan to reward yourself each week only if you have been more active than you were during the previous week. If trying to eat more vegetables, only reward yourself on days when you ate more portions of vegetables than you did on the day before.

Notes: Requires external inputs: No

#91 - Self-disincentive

Definition: Decide (or remind yourself) that performing an unwanted behaviour will result in future penalties or removal of rewards

Example: Thinking about punishments and negative consequences of not performing a behaviour can be motivating. For example, if you wish to be more physically active, think about how not being physically active increases your risk of a heart attack. Or, tell yourself that if you do not go to the gym, then you will not allow yourself to watch television in the evening.

Notes: Long-term use should be avoided. Imposed penalties should not be made too severe.

Requires external inputs: No

Possible adverse effects: The penalty that you set up will likely be unpleasant and could be stressful.

#92 - Behaviour cost

Definition: Withdraw something you value if you fail to perform the target behaviour

Example: Penalties for unwanted behaviours can increase the chances we perform wanted behaviours. If you want to become more active, pay money into a jar each day that you have been less active than you would have liked. After some time, give the money in the jar away to a cause or organization that you don't like. If trying to reduce unhealthy snacks, you could set up a similar system, but put in money each time you eat an unhealthy snack.

Notes: **Requires external inputs:** No

Possible adverse effects: Losing out on money or other valued things will likely be unpleasant.

#93 - Self-penalty

Definition: Penalize yourself if you fail to perform the target behaviour

Example: Linking unwanted behaviour to an unpleasant consequence may decrease the behaviour's probability in the future. If trying to improve your diet, penalize yourself each time you eat an unhealthy snack or prepare an unhealthy meal. For example, after eating a bar of chocolate you could perform an activity you do not enjoy (e.g. clean the toilet) or take away an activity you do enjoy (e.g. turn off the television).

Notes: Long-term use should be avoided. Imposed penalties should not be made too severe.

Requires external inputs: No

Possible adverse effects: The self-penalty will likely be unpleasant.

#94 - Remove reward or incentive

Definition: Discontinue rewards or self-incentives after failing to perform the target behaviour

Example: Rewards, and the threat of losing rewards, can be motivating and shape behaviour. For example, suppose you were trying to become more physically active and had set up an incentive to reward yourself each time you go for a walk after work. To use this technique, you would stop rewarding yourself for one week if you failed to walk one day. Missing out on rewards for a while can make you not want to miss out on them again.

Notes: **Requires external inputs:** No

Prerequisites: Some self-incentive (78-79, 82-83, 87-90)

#95 - Remove penalty or disincentive

Definition: Discontinue penalties or self-disincentives after successfully performing the target behaviour

Example: The threat of penalties can be motivating, but is not always needed. For example, suppose you were trying to become more active, and had planned to penalize yourself each time you failed to go for a walk after work. In this technique, you would stop penalizing yourself for a while if you had succeeded in going for a walk. Removing penalties when they are not needed can help you focus on other reasons for doing the target behaviour.

Notes: Requires external inputs: No

Prerequisites: Some penalty or disincentive (91-93)

#96 - Imaginary punishment

Definition: Imagine failing to perform the target behaviour in a real-life situation followed by imagining an unpleasant consequence

Example: When trying to reduce an unwanted behaviour, it can be useful to vividly imagine the bad consequences the behaviour can have. For example, if you were trying to eat smaller meals, you could imagine yourself overeating and feeling bloated or too full afterward. Or, if trying protect yourself from the sun, you could imagine going to the beach without sunscreen, and then having a painful sunburn. Imagining these unwanted outcomes can guide behaviour to prevent them from happening.

Notes: Requires external inputs: No

#97 - Imaginary reward

Definition: Imagine performing the target behaviour in a real-life situation followed by imagining a pleasant consequence

Example: Thinking about positive results can help you change your behaviour. For example, imagine the positive outcomes of being active in real life. These could include improved fitness, a pleasant warmth in your chest, having fun moving your body, or feeling happy after exercise.

Notes: Requires external inputs: No

Prerequisites: Mental rehearsal of successful performance (108)

#98 - Reflect on desire to perform behaviour

Definition: Reflect on your desire to perform the target behaviour

Example: Thinking about how much you want to perform a healthy behaviour can boost your motivation for it. For example, if you're trying to become more physically active, rate your desire to be active using a scale of 0-10. If you answered 1 or higher, think about why you said that number and not 0. Knowing and thinking about how much you want something can help strengthen your efforts to achieve it.

Notes: Requires external inputs: No

#99 - Reflect on ability to perform behaviour

Definition: Reflect on your ability to perform the target behaviour

Example: Thinking about what we are capable of can give us a boost to keep going. For example, if you are trying to improve your diet, use a 0-10 scale to rate your confidence in eating only healthy foods each day. If you said something other than 0, then you can feel at least somewhat confident in sticking to the healthy diet. Or, identify what things you need (e.g. information, social support, new skills) to feel more capable of carrying out the behaviour.

Notes: Requires external inputs: No

#100 - Reflect on reasons to perform the behaviour

Definition: Reflect on your own reasons and personal motives for performing the target behaviour

Example: Thinking about the reasons “why” you (might) want to perform a behaviour can help you to understand whether it is right for you. Make a list of your main motives for being physically active. This could include things like enjoying the outdoors, having fun with family, or wanting to feel more fit. It might also include potentially feeling guilty if you were not physically active. Having a list of your own reasons for being active can help to keep you on track.

Notes: Requires external inputs: No

#101 - Reflect on need to perform the behaviour

Definition: Reflect on your need to perform the target behaviour

Example: Thinking about how much you need to perform a behaviour can help you to understand whether it is right for you. If considering being more active or improving your diet, think about how necessary these changes are. Is the change at least somewhat necessary? Is it something that you should probably do? If so, considering this need to change can help motivate you to take action and carry out the behaviour.

Notes: Requires external inputs: No

#102 - Find meaning in target behaviour

Definition: Identify (or remind yourself of) links between the target behaviour and your values, relating the behaviour to something personally or socially meaningful

Example: Knowing that a new behaviour fits in with your values can help you to engage in it. If trying to become more physically active, identify how physical activity would fit in with your values of "being healthy" or "having fun". You could also consider how walking or cycling to work would fit in with your value of caring for the environment. A strong link between your values and a new behaviour can help to keep you on track.

Notes: Requires external inputs: No

#103 - Critically assess beliefs

Definition: Evaluate and challenge the accuracy of your own beliefs

Example: False beliefs can prevent people from engaging in a wanted behaviour. Evaluating and challenging your own beliefs can thus make behavioural changes easier. For instance, you might think it is unpleasant to go jogging when it is raining outside. Yet, once your body warms up, the rain might actually feel cool and refreshing. Or, you may have heard that drinking more water can lead to weight loss, but is this actually true? Regularly questioning your beliefs can help you to avoid being tricked by misinformation.

Notes: Requires external inputs: No

#104 - Incompatible beliefs

Definition: Identify or reflect on discrepancies between current or past behaviour and self-image and values

Example: Identifying mismatches between one's behaviour and values or self-image can help to spark change. For example, valuing health, but eating a poor diet is one such mismatch. Another is viewing yourself as having an active lifestyle, but spending 12 hours per day sitting. Resolving these discrepancies can lead to behaviour change.

Notes: Requires external inputs: No

#105 - Associate identity with changed behaviour

Definition: Construct a new self-identity that is in line with performing the target behaviour

Example: The way you think about your current and past selves can have an impact on your motivation and behaviour. If you are trying to become more physically active, view yourself as someone who "used to be inactive" or as a "former couch potato." Or, view yourself as an "exercise lover" or as "someone who works hard to get stronger and fitter". Taking a new outlook on your self-identity can help you to start and maintain new behaviours.

Notes: Requires external inputs: No

#106 - Valued self-identity (personal strengths)

Definition: Describe or reflect on your strengths in relation to the target behaviour

Example: Knowing your own strengths, such as 'being persistent', can help you to change your behaviour. Make a list of your strengths, and think of how each could help you to be physically active. For example, your ability to be persistent can help you to overcome barriers or a lack of motivation. Or, if you are trying to improve your diet, your ability to schedule and plan can help you to always have healthy food options available.

Notes: Requires external inputs: No

#107 - Verbal self-persuasion about own capability

Definition: Persuade self of capability to perform target behaviour, arguing against self-doubt

Example: Talk encouragingly to yourself about your ability to deal with challenges and perform the behaviour. Use statements like "This isn't easy, but I CAN do it - I know because I've done it before." And "If I keep going I will reach my goal eventually, but if I give up now I'll never get there." You could also talk yourself through an activity, reminding yourself of the instructions such as "breathe and move your feet at an even pace." This positive self talk can boost your confidence and help you achieve your goals.

Notes: Requires external inputs: No

#108 - Mental rehearsal of successful performance

Definition: Imagine successfully performing the target behaviour in relevant contexts

Example: Mentally practicing doing a behaviour can help you to perform it better in real life. If trying to go cycling once per week, picture yourself in your athletic clothing moving easily along a bike path. You could also mentally practice the actions you would need to take to get there, such as preparing a water bottle or oiling your bike so that it is ready to go. If you visualize it in your mind, then doing it in real life will be easier.

Notes: Requires external inputs: No

#109 - Focus on enjoyment (pleasant aspects) of behaviour

Definition: Focus thinking on pleasant rather than unpleasant aspects of the target behaviour

Example: Physical activity has both positives and negatives. When being active, keep focused on the positives, such as a feeling of getting stronger or having fun. At the same time, avoid thinking about the negatives, such as getting tired or sweating. Taking this positive view can help you to stick with your new physical activity routine.

Notes: Requires external inputs: No

#110 - Positive re-framing

Definition: Take a more positive view of your current situation

Example: Thinking about your current behaviour in a positive way can help you keep going. For example, if you smoke 10 cigarettes per day, view this as a positive instead of a negative. In other words, think "10 is better than 20 or 30" instead of "I failed to stop smoking today". Or, if you are active for 5 minutes per day, do not tell yourself "I ONLY managed 5 minutes of physical activity today". Instead, think "something is better than nothing". This re-framing will help keep you focused on the positives, and can motivate you to make further progress.

Notes: Requires external inputs: No

#111 - Focus on past success

Definition: Think about or list previous successes in performing the target behaviour (or parts of it)

Example: Thinking about past successes can give you confidence to do the same again. If trying to become more physically active, focus on times in the past when you succeeded in being active. Think about how you did it and how things were in those times. This visualization can help you to replicate those situations in the present day.

Notes: Requires external inputs: No

#112 - Looking back

Definition: Reflect on what life was like 'before,' and observe how you have changed over time

Example: Thinking about how things 'used to be' can motivate you to get back to that state. If you are trying to smoke or drink less, bring to mind how your life was before you started engaging in these unwanted behaviours. Then, consider how it has changed over time as a result of your behaviour. How has the behaviour affected your health, finances or social relationships? Looking back to the past can help you get more motivated to attempt a behaviour change for your future.

Notes: Requires external inputs: No

#113 - Manage negative emotions

Definition: Take steps to reduce negative emotions to facilitate performance of the behaviour.

Example: Negative emotions and stress can get in the way of behaviour change or management. To reduce the impact of these negative emotions, you could use relaxation techniques such as deep breathing or meditation. Or, if you wanted to become more physically active, but had a rough day, you could take a bath to relax first, before going for an evening walk. You could also postpone your efforts until a time when you are feeling more positive about it. Being in a positive frame of mind can help you to engage in the health behaviours you want.

Notes: Information about common stress reduction techniques can be found online or from a healthcare professional.

Requires external inputs: No

#114 - Normalize difficulty

Definition: Recognize (or remind yourself) that it is common to face difficulties when pursuing behavioural changes

Example: Changing behaviour is not easy. Remind yourself of this when facing difficulties in pursuing behaviour change. Knowing that other people have faced the same challenges can give you the strength to keep going. For example, when making a plan to go to the gym 3 times a week, remind yourself that there will be setbacks and times when you will not reach your goal. Recognize that this is normal. Do not interpret this difficulty as a personal failure or as something to stop you from trying.

Notes: Requires external inputs: No

#115 - Self-kindness

Definition: Reflect on your own difficulties, efforts and self-worth, in a kind and accepting way

Example: Everyone faces difficulties when trying to change behaviour, but don't let these get you down. Instead, when you feel inadequate or perceive failure, accept that you are still a valuable person. For example, if you missed your appointment with a personal trainer, do not beat yourself up for it. Instead, be compassionate and accepting toward yourself. Being kind to yourself when facing struggles, and in general, can help keep you going in the long term.

Notes: Requires external inputs: No

#116 - Acceptance

Definition: Recognize and accept negative thoughts, feelings, emotions, and physiological states related to the target behaviour

Example: It is normal to feel both positively and negatively about a behaviour at the same time. Recognize these negative thoughts and feelings, understand that they are normal, and allow them to pass on their own. This can help you keep going with the behaviour. If you have started jogging, you might feel uncomfortable, sweaty and out of breath. You might think to yourself, "This stinks!," or feel frustrated that jogging is more difficult than it used to be. Reflect on these experiences as a normal part of getting started and allow them to pass in time. This will help you to not get hung up on any doubts or resistance you have in relation to a new behaviour.

Notes: Requires external inputs: No

#117 - Re-attribution

Definition: Reinterpret previous failures as being caused by external/unstable factors and previous successes as being caused by internal/stable factors.

Example: The way you interpret successes and failures can influence your future behaviour. When you have met a goal (e.g. going to the gym twice a week), view it as something permanent and that you accomplished yourself (i.e. as a guide for future efforts). When you have not met a goal, view this as something temporary and specific to that situation. Recognize that external forces got in the way of success. Use this setback as a learning experience to overcome barriers in future situations.

Notes: Requires external inputs: No

#118 - Gain/loss framing

Definition: Frame consequences of wanted behaviours as gains, and of unwanted behaviours as losses

Example: You can think of consequences of (not) performing a behaviour as gains or losses. For example, if you are trying to be more physically active, frame the results of going to the gym as gains (e.g. "If I go, I will feel more energized"). Likewise, frame the results of not going to the gym as losses (e.g. "If I don't go, I will feel unhealthy"). This can help you to feel more motivated. If you are trying to stop smoking, frame the consequences as "If I stop smoking, I will gain years of life" instead of as "If I stop smoking, I will not die as young."

Notes: Requires external inputs: No

Prerequisites: Some "Obtain information..." technique (35, 36, or 37)

#119 - Interpreting physiological and emotional states

Definition: Interpret (changes in) how you feel physically, mentally, or emotionally to judge your capabilities and progress

Example: Paying attention to the impact of a new behaviour on one's body and mind can help you see progress. When becoming physically active, view changes in your physiology (e.g. heart rate, breathing, muscle tiredness) as normal. Interpret this as evidence that you are doing well and are capable of being active. When trying to eat less, interpret the rise and fall of hunger pangs as evidence of your ability to carry on.

Notes: Requires external inputs: No

#120 - Identify sources of pressure for behaviour

Definition: Identify sources of pressure (external or internal) and expectations to perform the target behaviour

Example: External pressures to perform a behaviour can get in the way of performance. Recognizing these pressures (e.g. other people's wishes, or your own desire to avoid guilt or shame) can help keep you on track. If trying to become more physically active, identify these sources of external pressure. Then, examine what role they play in your desire to be active. For example, inspect whether they push you towards going to the gym, the sofa or the fridge. Identifying sources of pressure you might want to get rid of can help make behaviour change easier.

Notes: Requires external inputs: No

#121 - Identify ways of dealing with pressure

Definition: Take steps to manage or limit the effects of pressure (external or internal) to perform the target behaviour

Example: Feeling forced to perform a behaviour can make you feel bad about doing it. If someone pressures you to change your behaviour, tell them they are not helping the situation. Or, if someone criticises your efforts with negative feedback, avoid or tune that person out to help you keep focused.

Notes: Requires external inputs: Potentially

Prerequisites: Identifying sources of pressure (120)

#122 - Emphasize autonomy

Definition: Acknowledge own ability for choice in relation to the target behaviour

Example: Recognizing that you are in charge of your own behaviour can help you to adopt new behaviours. If you are trying to become physically active, acknowledge that you have choice in whether it happens. Also note that you are free to choose when and how any potential changes take place. It could be walking, cycling, going to the gym or playing a new sport. This can help ensure your decisions about behaviour are personally-relevant.

Notes: Requires external inputs: No

#123 - Prayer

Definition: Appeal to a higher power for changes in motivation or behaviour

Example: Praying to a higher power can help you find motivation to change your health behaviour. For example, go to a place of worship or say a prayer at home. In the prayer, ask for help to become more active, or express thankfulness for motivation you have now.

Notes: Requires external inputs: No