

1. Introduction session

The introduction session is offered to provide interested participants with information over de MeST. This is done in a half-hour explanation, after which they can decide about whether they would like to participate. The session starts with a short introduction of psycho-education on memory problems in depression, which will be addressed extensively in the first session. This provides participants with insight over de role of memory training. Thereafter follows practical information.

1.11 Psycho-education

Patients receive information on the general background of MeST. The session starts with a description of the three types of memory problems in depression (this information is not provided in the case of a waitlist-control condition, see p. XX).

“A large part of memory problems in depression are due to problems in attention and concentration. When someone is depressed they find it difficult to concentrate. For example, it is more difficult to remain concentrated whilst reading or during a conversation it is more difficult to keep listening to other people. These types of attention and concentration problems have influence on memory. Information is not encoded equally well and not remembered as well.

*“A second memory problem is that individuals with depression remember mostly **negative or unpleasant things** from the past. As a consequence individuals with depression find it more difficult to recall positive events from memory because of their dark mood.”*

*“Thirdly, individuals with depression also suffer from **overgeneral memories**. This means that when they are asked to remember a memory from the past, they remember general memories without going into any specific details.”*

“The first two types of memory problems disappear as the end of a depressive episode. The third memory problem, however, persists after the depression has subsided. An overgeneral memory can lead to a number of problems, such as difficulties with problem-solving and rumination. This is why this training teaches individuals to make memories more specific.”

For some of the patients the notion of working with memories is confronting due to traumatic or emotional events in the past. We recommend checking with potential participants whether there are any such experiences that cause a problem to work with memories.

1.2 Practical information

After the psycho-education participants are provided with the practical aspects of the training. The exercises are set up to be administered over the course of four consecutive weekly training sessions. The training sessions are one hour each. The setup of the MeST makes it possible to

work in a group. It is, however, not a group therapy where personal problems are discussed. The framework is more of a training of cognitive skills that aim to make memories more specific in order to positively influence **[this is the literal translation I would change it to reduce]** depressive symptoms and vulnerability to depression.

The participants are given the opportunity to ask questions to avoid possible misunderstandings. Ask the participants to bring a pen or make sure there is enough stationary available for the exercises.

In the case of research with a **waitlist-condition** it is important to provide as little details about the research as possible because one part of the participants (the control-condition) will not receive the training. These people will, however, have to complete questionnaires at regular intervals. To give a rationale to the research participants can be told that you are investigating the psychological characteristics associated with depression, which is why questionnaires have to be completed repeatedly.

2. Practical information for the coach

The setup of the room during the four training sessions depends on the logistical possibilities, de wishes of the participants, and the number of participants. Some participants/patients feel good in a circle of chairs others feel safer sitting at a table. The ideal number of participants is between six to eight people because this gives everyone a chance to have their turn and participants can stimulate each other to exercise.

During the psycho-education in session 1 or while illustrating exercises, it can be helpful to take notes on a blackboard in the room. A visual schema can help participants understand the information more successfully and understanding and remembering the information better. For the other three sessions it is also recommended to have a blackboard or a flip-chart available to repeat certain points or to clarify them in the plenary session for the whole group.

3. General rules for each session

3.1 Stimulate and reinforce

The coach should be attentive to providing sufficient positive reinforcement during each session for each type of contribution and during the exercises, irrespective of their accuracy.

For “correct” answers (i.e., specific memories) reinforce the participants for example by paying them a compliment. Thereafter, the coach can challenge participants to provide even more details for the memory. Think of visual, olfactory, auditory, and emotional elements of the events (contextual and sensory-perceptual details).

Example from a participant:

“Last year I spent a day at the sea with my friends and we had an ice-cream on the beach.”

Sample responses:

“Great. This is a very nice example of a specific memory. The instance of the memory lasted for less than a day and had specific elements. Can you also remember what the surroundings looked like where this happened? And if there was a specific smell? Was the temperature remarkable on that day? Warm or cold?”

“You noted a specific memory. Well done. Let us have a look at the extra details to make the memory even more specific.”

Also in the case of “less correct” replies (i.e., general replies) participants should be reinforced for their effort, after which they are encouraged to make their memory more specific.

Example from a participant:

“I often go to the sea.”

Sample responses:

“Great. You remember trip to the sea. This memory is indeed about something you have experienced, but let us now go a step further and try to find a specific moment on a single day on which this happened, where it took place, and with what people.”

3.2 Everyone is participating

As coach you should be aware that each participant contributes actively to the sessions. Take care that it is not always the same person that replies and try to involve everyone in the session. By looking at the exercises together participants can help each other to look for more details. Ask them to provide each other with suggestions and/or to ‘challenge each other’ with questions designed to remember more specific details of the memory.

It can be helpful to know the names of all the participants. In small groups this isn’t a problem, but in larger groups it may be useful to provide stickers with the names to put on their clothing.

Always gage whether all the participants have understood the explanation. For example: *“Does this make sense to everyone?”*, *“Does anyone have any questions?”*. From experience it appears that there are always a few people who get detached from the session because they don’t understand and/or are unable to complete the exercises.

3.3 What to do with memories that are not from their own experiences

It can happen that participants recall memories that others have experienced, that refer to situations of which they themselves were not part or that they refer to a film that they have seen. Encourage the participant to go looking for a memory from the own, personal realm of experience.

Example from a participant:

“My grandfather went to the sea each Sunday.”

“When Barak Obama was elected president.”

Sample responses:

“Ok, this is good, you remember certain things that have happened. Can you now remember something that you experienced yourself. Can you give an example of an instance where you went to the sea?”

“This is a great example, but you refer to a fact. Could you make your memory more specific by indicating where you were when you heard or saw the news, or things you thought and felt when you knew who the new president was.”

3.4 Someone provides a negative memory for a positive word

From research we know that positive words can also evoke negative memories. This is not a problem in the context of this training. The critical part of the exercises is not the content of the memories but their specificity. If you like, however, you can probe whether the participant can also remember a positive specific memory for the cue.

3.5 What to do when the memories are confronting

For some participants some of the words might reactivate memories that refer to recent traumas or difficult situations. For these participants who get stuck on a memory or who have symptoms of re-experiencing we recommend to discuss the incident with the participant after the session and possibly conclude to discontinue with the training. The aim of the training is to develop cognitive skills, not the processing of emotionally-laden memories.

3.6 A back-up of words

Always keep a list with a number of words that are not recorded in the workbook. That way there is room for additional exercises in case the participants are done with the session too quickly. A few suggestions are: movie, creative, failed, ...

4. Session 1

The participants receive the work sheets for the first session. Their folder is expanded each week.

4.1 Psycho-education

During the psycho-education time is spent on the theoretical background of the memory training. It is important to ask participants whether they have experienced these types of problems. Do they recognize these problems?

[pp. XX-XX in the workbook]

4.2 Good and bad examples of specific memories

The participants have a number of sample memories in their workbook. The examples are discussed collectively and for each one it is elaborated why it is a good or bad example.

Example 1: Desk

WRONG: "I work at my desk every day."

"This memory is about you, it is a personal memory. But it is not specific. It is about an event that happened several times. It is something that happens every day (it is a type of event). This means that the memory is not about a specific moment."

WRONG: "In the past I used to always do my homework on my bed instead of at my desk."

"This memory is again a personal memory, but it is not specific. 'In the past' is not specific, it is not about a specific day." 'Always' refers to an event that has happened repeatedly.

GOOD: "Two months ago I got a new desk at my work on a Monday."

"This memory is specific. It describes a specific event (receiving a new desk). It is about a memory that happened on a specific moment, that happened only once, and thus not 'every day' such as the first example."

All four examples are discussed in this manner.

Before starting with the exercises the coach provides to own examples. He/she chooses a positive and neutral word and provides general and specific memories for it. Explain why certain examples are good/bad.

4.3 Exercises

The participants are challenged to go from general to specific memories. For specific memories they are asked to provide extra details. Ask questions about where, when, how, etc...

Furthermore, it is important to emphasise that the participants should best remember the situation from their own perspective (so called field-perspective). This means that they see it happening through their own eyes. To recall extra details it can be helpful to ask participants to close their eyes and to imagine the situation visually.

In the first and the second session the exercises include positive and neutral words. Negatively valenced words will only be introduced in sessions three and four.

4.4 Exercises for at home

The participants can keep practicing the task from the session at home with ten new words. Additionally, they are also asked to note one memory of the day. Recommend participants to do the exercise at the end of the day. They are not supposed to note down the event and details during the day when they may be in the middle of the situation. Encourage the participants to do the exercises but also make sure that they know that there are no consequences if they don't complete an exercise.

5. Session 2

The participants receive the work sheets for the second session.

5.1 Repeating session 1

At the start of session 2 a short repetition of session 1 is provided. To do this, provide a short overview of the three types of memory problems and if possible write them on a blackboard.

“Do you remember that individuals with depression have different types of memory problems? First there are problems with attention and concentration, which make it difficult to read a book, watch a film, follow a conversation or to remember what you were supposed to get in the basement. Secondly individuals with depression are more likely to remember negatively tinted memories. Then there is a third memory problem, overgeneral memory, which is what we are working on in these sessions. This means that memories are recalled in a general way without details about the location, the situation, the people involved, etc... This appears to be related to depressive symptoms, more difficulties problem-solving, greater difficulties to form specific images about the future and more rumination. It also makes the processing of unpleasant experiences more difficult.”

5.2 Going over the homework

It is important to take enough time to discuss the homework. Show your appreciation for the time they invested in the completion of these exercises.

Before going through the exercises probe them about their experiences while completing the exercises.

“How did you go about the exercises? (Did you do an exercise a day or all on the same day)”

“Was it difficult to come up with a specific memory yourself?”

“What did you think of the exercise at the end of the day to record a memory? Was this harder or easier than the exercise where you had to recall a memory for a word.”

After the general comments the exercises are discussed.

“Who came up with a memory for the word proud?”

- In the case of a specific memory: *“Very good, have you come up with extra details for your memory?”*
- In the case of a non-specific memory: *“This was a good attempt. Let us see if we can make the memory more specific. Does anyone have a suggestion?”*

- If nothing was noted: *“Maybe you didn’t find the time this week but could you maybe try to come up with a specific memory now?”*

As coach you need to make sure that everyone gets their turn. (But do not insist too often or for too long.) Encourage and challenge participants to be more specific (recalling more details is the message). See if others have a question to (further) specify the memory of another participant (ideally it is not only you as coach who is prompting/challenging the participants, but also the participants will prompt and challenge each other (the coach as model). It is about “training ourselves/our brain to make the memory work better, be more specific, etc...”

5.3 Exercises for session 2

The exercises in session 2 have the same structure as in session 1. The difference is that in session 2 two memories have to be recalled and there is an additional instruction. After noting the two memories participants are asked to find the differences between the two memories. This can encourage participants to further reduced overgenerality. It takes away the focus from the generic aspect of the memories and emphasises the aspects of the memories that make them specific. Examples of differences are: different locations, different people that were involved, weather conditions, etc...

5.4 Exercises for at home

These exercises are the same as the ones in session 1. The only difference is again that the participants have to indicate the differences between the two memories (for the same cue).

6. Session 3

The participants receive the work sheets for the third session.

6.1 Repetition of session 2

At the start of session 3 a short overview of session 2 is provided.

6.2 Going over the homework

It is important to take the time to discuss the homework. Show your appreciation for the time they have invested in the completion of these exercises.

Before going through the exercises probe them about their experiences while completing the exercises.

“How did you go about the exercises? (Did you do an exercise a day or all on the same day)”

“Was it difficult to come up with a specific memory yourself?”

“What did you think of the exercise at the end of the day to record a memory? Was this harder or easier than the exercise where you had to recall a memory for a word.”

After the general comments the exercises are discussed.

“Who came up with a memory for the word disappointed?”

- In the case of a specific memory: *“Very good, have you come up with extra details for your memory?”*
- In the case of a non-specific memory: *“This was a good attempt. Let us see if we can make the memory more specific. Does anyone have a suggestion?”*
- If nothing was noted: *“Maybe you didn’t find the time this week but could you maybe try to come up with a specific memory now?”*

6.3 Exercises for session 3

The exercises for session 3 also contain negative words and there is no more space to note details. The participants are therefore required to immediately provide as much detail as possible for each memory. In session three participants first note two memories for a negative cue, followed by two memories for the positive opposite of that word (e.g., clumsy vs. handy). This is intended as additional incentive to counteract generalising.

6.4 Exercises for at home

The participants receive ten exercises as homework, such as the ones practiced during the session. In addition to these they are given the additional task of noting two memories each evening from that day.

7. Session 3

The participants receive the work sheets for the fourth session. (That is, it is important that the participants do not receive all the work sheets on session 1 but rather session by session.)

7.1 The STOP-model

In the last session a model is introduced and practiced to observe one's own thinking. It is called the STOP-model. Its aim is to learn to stop and to note overgeneral thinking in one's self.

The introduction to the model is provided on page XX. The model is discussed together with the participants. It is important to note that the starting point of overgeneral thinking can in fact be a specific memory.

7.2 Exercises

Identical to session 3.

7.3 Conclusion

Ask the participants about their experiences during the sessions. Have they learned something? What did they consider helpful/positive, what less so? If something should be adapted to improve the training: what is that exactly?