Welcome to

Metacognitive Training for Depression (D-MCT)
D-MCT: Satellite Position
Today's Topic

- Behavior
- Memory
- Depression
- Perception of Feelings
- Thinking and Reasoning
- Self-Worth
D-MCT Topic: Memory
Many individuals with depression complain of having problems with concentration and memory.
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Decreased concentration may even be a possible diagnostic criteria for depression.
How is memory related to depression?

- Many individuals with depression complain of having problems with concentration and memory.

- Decreased concentration may even be a possible diagnostic criteria for depression.

Have you experienced this?
Is it theoretically possible to remember everything?
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- No, the storage capacity of our memory is limited.
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- Imagine that I told you a story. How much would you be able to remember in a half hour?
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On average, only about 60% of the information from a story could be recalled (40% could not!).
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- Advantage: ...
Forgetting is normal.

- **Advantage:** Our brains are not overloaded with irrelevant information, **but ...**
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A memory exercise ...
Exercise

- Complex scenes will be shown to you.

- Then, you will be asked what was depicted in the picture.

During this exercise, you should try to correctly remember as many details as possible.
Camping Trip
What was shown?

- Mobile home
- Awning
- Set table
- Bicycles
- Table cloth
- Chairs
- Blue sky
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= not presented
What was shown?

- Horse
- Fire
- Crown
- Wing
- Sword
- Armor
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False Memories!

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- Our brain fills in and mixes current impressions with past similar events (such as with the camping scene) and we also supplement our memories through logic (ex: the awning)!
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This phenomenon is also evident in everyday life:
### False Memories in Everyday Life

**Ex: Childhood memories**

- Sometimes we think that we clearly remember experiences that, in reality, we know only through photographs or stories from our parents.
- Classmates often remember the same event completely differently.
## False Memories in Everyday Life

| Ex: Childhood memories | ➢ Sometimes we think that we clearly remember experiences that, in reality, we know only through photographs or stories from our parents.  
➢ Classmates often remember the same event completely differently. |
|---|---|

<table>
<thead>
<tr>
<th>Ex: When situations are very similar</th>
<th>➢ Ex: A woman is certain that she has her wallet and remembers packing it in a red purse. Instead, the woman put the wallet in the brown purse the day before.</th>
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- **No!** False memories are normal and affect everyone.
Does that mean I can no longer trust my memories?

- **No!** False memories are normal and affect everyone.
- Keep in mind that (like everyone else) you can make errors because our memory is not a video camera.
How well we are able to remember things depends on how well we concentrate in the moment.
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Why could people with concentration problems have a poorer memory? Here's a little math problem …
A bus driver leaves the bus station in the morning with an empty bus. At the first bus stop, 5 people get on. At the next stop, 4 more people get on, and 2 people get off. At the next stop, 1 passenger gets off. At the next stop, 6 more people get on. At the following stop 8 passengers get out and 3 people get on. Then, at the next stop, 2 more people get out.
Question: How many times did the bus stop?!!
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Correct answer: at 6 stations!

In the end, 7 passengers remain on the bus, but that was not what was asked.
Concentration
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- Our attention works like a *spotlight*; only one object on the stage at a time can be illuminated.
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We can only correctly remember things that we have previously focused our attention on (i.e. passengers getting on and off the bus or bus stops)!
Concentration

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- We can only correctly remember things that we have previously focused our attention on (i.e. passengers getting on and off the bus or bus stops)!
- It is impossible to focus our attention on all information in our environment at the same time.
How do problems with concentration & memory occur?

- During strong ruminations circling thoughts often claim all of one's attention.
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- There is hardly any attentional capacity left that can be focused on other (more important) things in the environment. The spotlight is focused virtually inward.

- As a result, those affected by ruminations can later barely remember some details in their environment.
Frequent Concern: Am I getting Alzheimer's?
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- Loss of motivation, apathy and lack of energy that often occurs during depression can also explain reduced information intake.
Frequent Concern: Am I getting Alzheimer's?

No! The memory problems are explainable.

- It is rather related to decreased information intake versus "forgetting" altogether.
- Loss of motivation, apathy and lack of energy that often occurs during depression can also explain reduced information intake.
- When ruminations/depression are reduced, individuals can attend to other things again and remember them.
Do we all see and remember the same?

Example: 3 artists painting the same Catalan countryside...
Pay attention to the differences in the colors and the sizes in the three paintings!

Are there things that each artist depicted or omitted differently?

Andreas Weiβgerber

Helmut Schack

Bernd Hampel
Pay attention to the differences in the colors and the sizes in the three paintings!

Are there things that each artist depicted or omitted differently?

Andreas Weißgerber: The hills in this picture are flatter than those in the other two paintings.

Bernd Hampel: The colors in this landscape are much earthier than the other paintings. The tree to the right side of the street is missing (red circle).

Helmut Schack: In this picture, it is apparent that a different field stretches to the horizon. The landscape is almost colorful. In comparison to the other pictures, the cluster of trees are partially exposed in front of the horizon.
Do we all see and remember the same?
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- No, every person perceives things differently! As in the three paintings - the same landscape is visible but with different accents!
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- In general, we focus our attention on information that is *personally meaningful*, for example, because it fits our mood.
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- Studies show that our current mood influences what types of memories we will have access to.
What does this have to do with depression?

- Depressive moods often lead to remembering more negative experiences - pleasant or neutral experiences are not so easily remembered.
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- Events are therefore experienced and remembered not through *rose-colored*, but rather much more often through *gray-tinted glasses*.
- Example: During a concert, a phone rings. In hindsight, only the disturbance is remembered, not the beautiful music.

Have you experienced this?
Remembering through gray-tinted glasses

- The emotional **coloring** of memories also relates to false memories!
Remembering through gray-tinted glasses

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- This can impede a realistic view of the world and encourage depressive processing (therefore, providing additional "evidence" in the sense of depressive processing).
What can I do about it?
Practice remembering positive events more frequently in daily life, e.g., keep a joy diary, in which every evening you jot down things that went well.
What helps with memory problems in everyday life?
1. Try to incorporate as much **structure** into your daily schedule as possible. The more routine your behavior is, the less risk there is of forgetting something.
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1. Try to incorporate as much *structure* into your daily schedule as possible. The more routine your behavior is, the less risk there is of forgetting something.

2. It is also helpful to maintain the best possible "*external order*". You can find items more quickly and remember better when everything has a specific place.
3. Post important notes in logical places (e.g., medication schedules to the refrigerator or bathroom mirror; items to remember to take with you on the front door, etc.)
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4. Use appointment calendars or other memory aids (ex: from a Smartphone or email program).
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4. Use **appointment calendars** or other **memory aids** (ex: from a Smartphone or email program).

5. Make it a habit to always carry a **notebook** (or pocket calendar) and a pen so that you can note down important things (such as To-Do lists).
6. When you are travelling and want to remember an idea but have no way to note it down, try to anchor it by linking the idea to an object (e.g., tie a knot in your hankerchief, move a ring to a different finger, put a rock in your pocket).
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7. The more senses and methods used while learning, the better the retention rate. Therefore, try to use various "channels", such as hearing, seeing, discussing, and applying.
Memory
Learning Points
Memory problems in depression can be explained (ex: through concentration problems; frequent rumination).
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Memory
Learning Points

- Memory problems in depression can be explained (ex: through concentration problems; frequent rumination).
- Unlike dementia, the concentration and memory problems in depression are less severe and can improve if the depression decreases.
- In general, our memory is deceptive! Our memory is prone to bias. Memory is especially dependent upon our current mood.
Use memory aids during periods of depression (calendars; post-its) and keep a joy diary.
Memory Learning Points

- Use memory aids during periods of depression (calendars; post-its) and keep a joy diary.
- Nobody's perfect: We all forget things. This is normal and sometimes a good thing!
Thank you!