Welcome to MCT-OCD

METACOGNITIVE TRAINING FOR OBSESSIVE-COMPULSIVE DISORDER

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What does "metacognition" mean?

???

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Cognition = derived from the Latin word for **“thinking”**

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Meta = derived from the Greek word for **“about”**

What does "metacognition" mean?

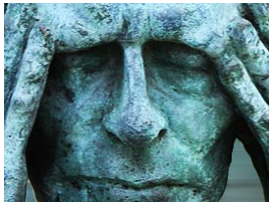
Cognition = derived from the Latin word for **“thinking”**

Meta = derived from the Greek word for **“about”**

Metacognition = thinking about thinking

Metacognitive Training

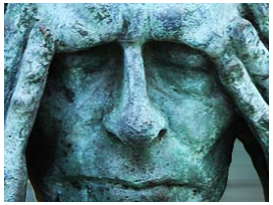
Human thinking is prone to thinking traps, which are found in many mental disorders:



Metacognitive Training

Human thinking is prone to thinking traps, which are found in many mental disorders:

- They are referred to as "**cognitive biases**" for the rest of the presentation



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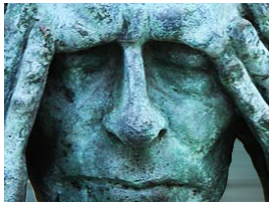
- Cognitive biases contribute to the development and maintenance of mental disorders



Metacognitive Training

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- They are referred to as "**cognitive biases**" for the rest of the presentation
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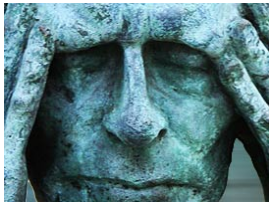
- To a certain extent, these thinking styles can be helpful (e.g., setting a high standard for yourself to avoid making mistakes). However, when taken too far (i.e., perfectionism), they cause problems for yourself



Metacognitive Training

Human thinking is prone to thinking traps, which are found in many mental disorders:

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- Cognitive biases contribute to the development and maintenance of mental disorders
- To a certain extent, these thinking styles can be helpful (e.g., setting a high standard for yourself to avoid making mistakes). However, when taken too far (i.e., perfectionism), they cause problems for yourself
- The MCT-OCD addresses the cognitive biases that are relevant to obsessive-compulsive disorder (OCD)

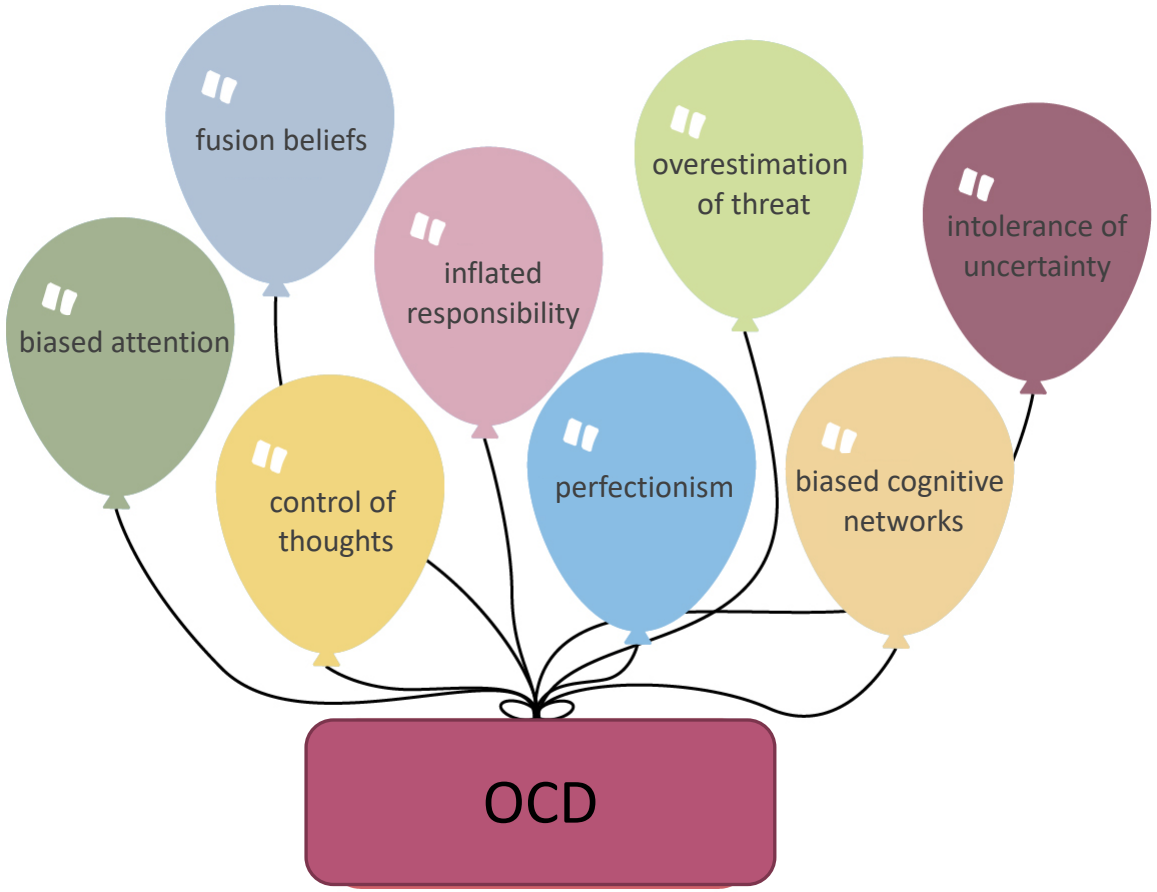
Homework

What homework did you do?

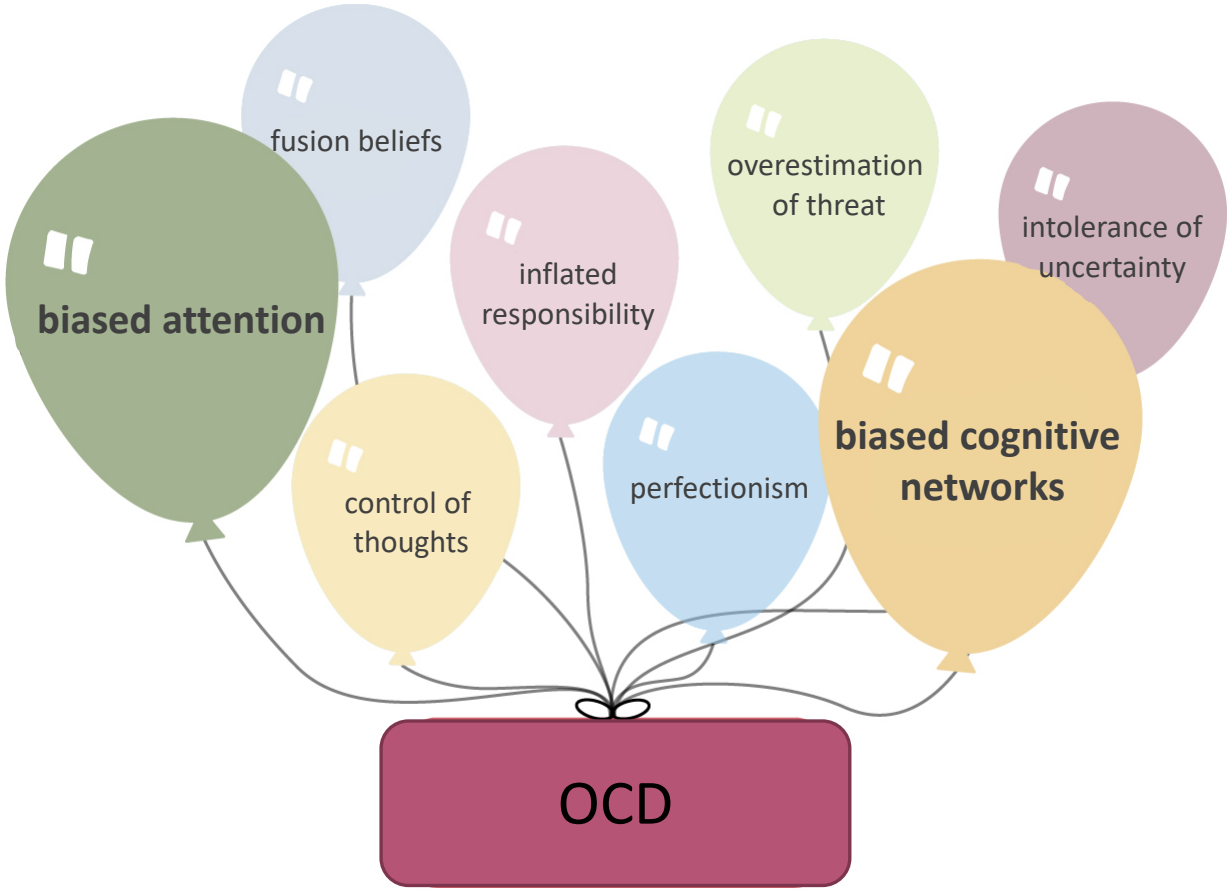
Where did problems occur?

What worked very well?

Cognitive biases in OCD



Module 8: Biased attention and biased cognitive networks



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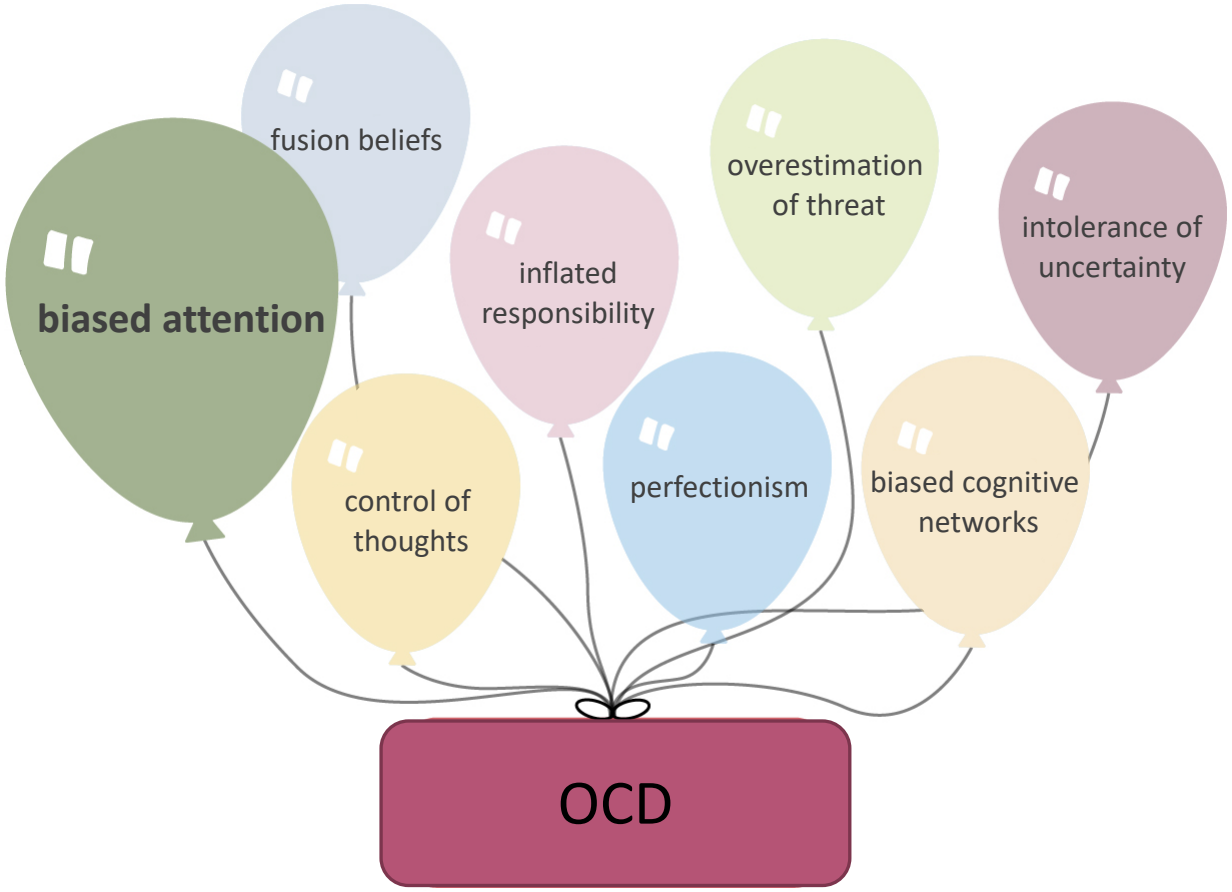

Biased attention

What is that? A short exercise at the beginning:

Biased attention

What is that? A short exercise at the beginning:

- Take a close look at the image below and notice the first things that catch your eye

Exercise

Exercise

What might catch the eye of people with different fears and OCD symptoms?

Exercise

Depending on the content of the OCD, this could be, for example, the knife block, the electrical devices, the faucet, the stove knobs or the cleaning products

Biased attention

This refers to our tendency to pay more attention to things that are of personal importance

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"OCD glasses"

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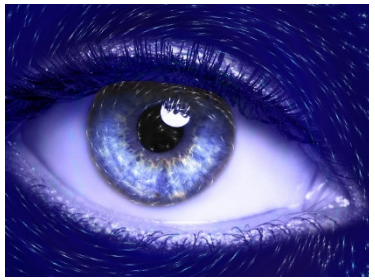
- Often the environment is literally "scanned" for stimuli related to their fears



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"OCD glasses"

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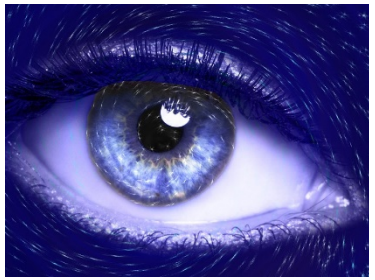
What are your examples?



OCD glasses- Examples

Sharp objects, splinters, shards, knives

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Dirt, sticky residue, sweaty hands, stains

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Noises in the car, bumpy roads, objects, lying next to the road

OCD glasses- Examples

Locks, sockets, electric switches

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OCD glasses- Examples

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What helps?

Dirt, sticky residue, sweaty hands, stains

Noises in the car, bumpy roads, objects, lying next to the road

Focus of attention

- Try shifting your attention to another stimulus of the same sensory modality:

Focus of attention

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  - **Visual** stimulus (e.g., when you compulsively scan everything for dirt)

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  - **Visual** stimulus (e.g., when you compulsively scan everything for dirt)
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What could these new, alternative stimuli be?

Alternative stimuli

Visual	Acoustic	Olfactory

Alternative stimuli

Visual	Acoustic	Olfactory
Look for (examples): • All blue things in the room • The number of black cars • The color of people's eyes • Happy or annoyed faces • Blond or black hair • Clothing material • … 		

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Exercise: Focus of attention

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- Choose a sense modality: visual, acoustic or olfactory

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- For the next 30 seconds, try to focus on this modality and direct attention to a specific stimulus

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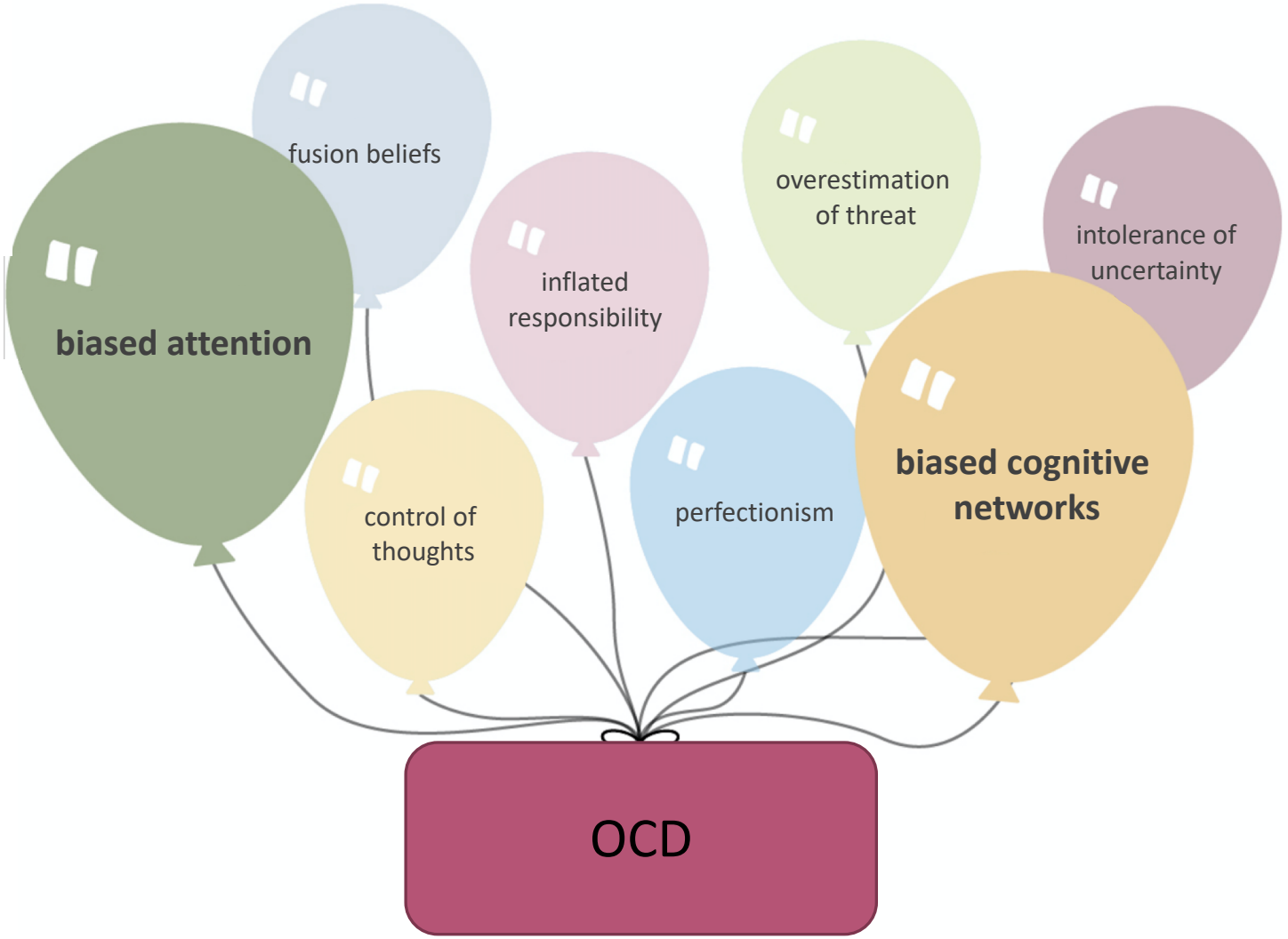
What was your experience like?

Module 8: Biased attention and biased cognitive networks



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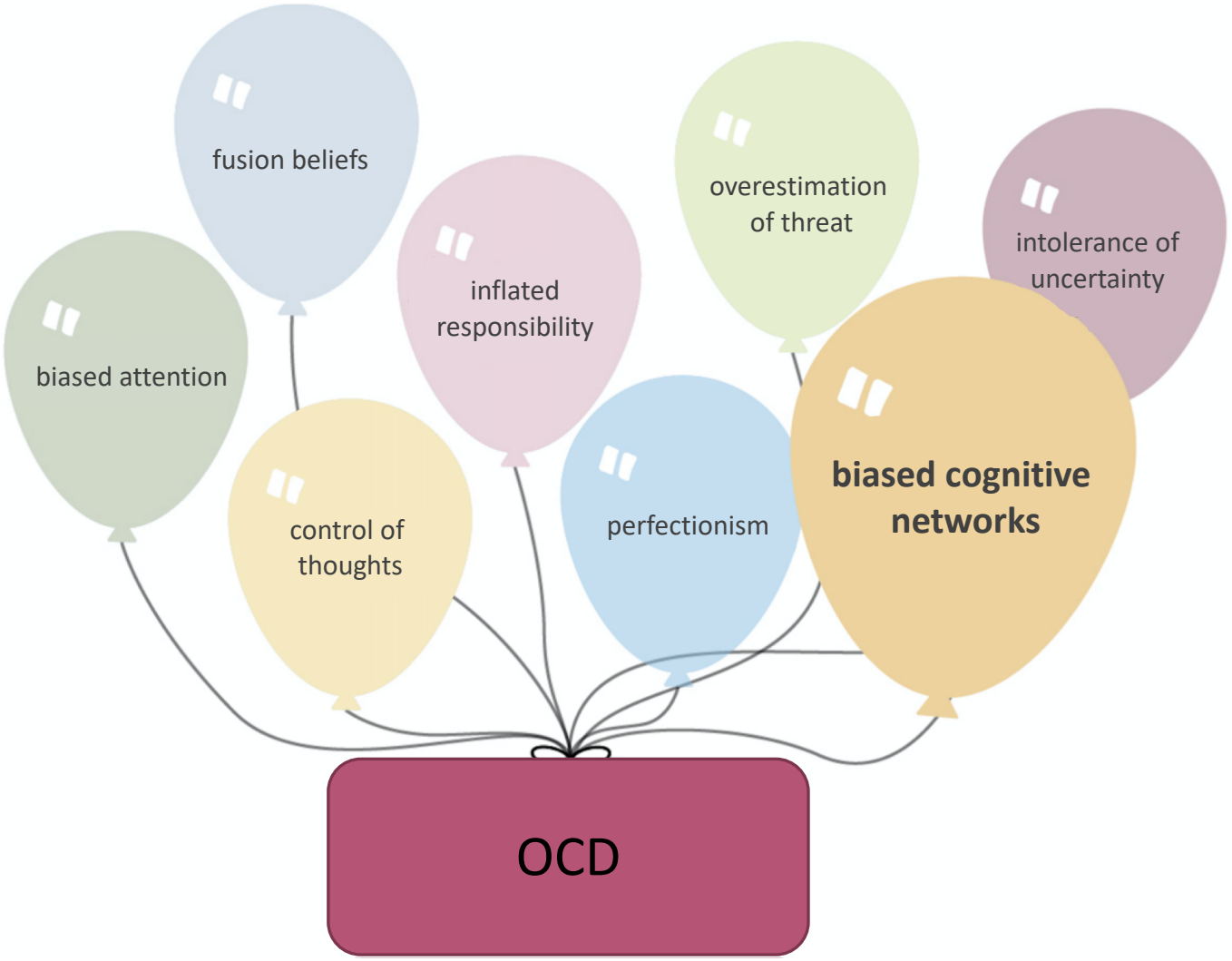

Cognitive networks

What is a cognitive network? Here is a short exercise to illustrate this:

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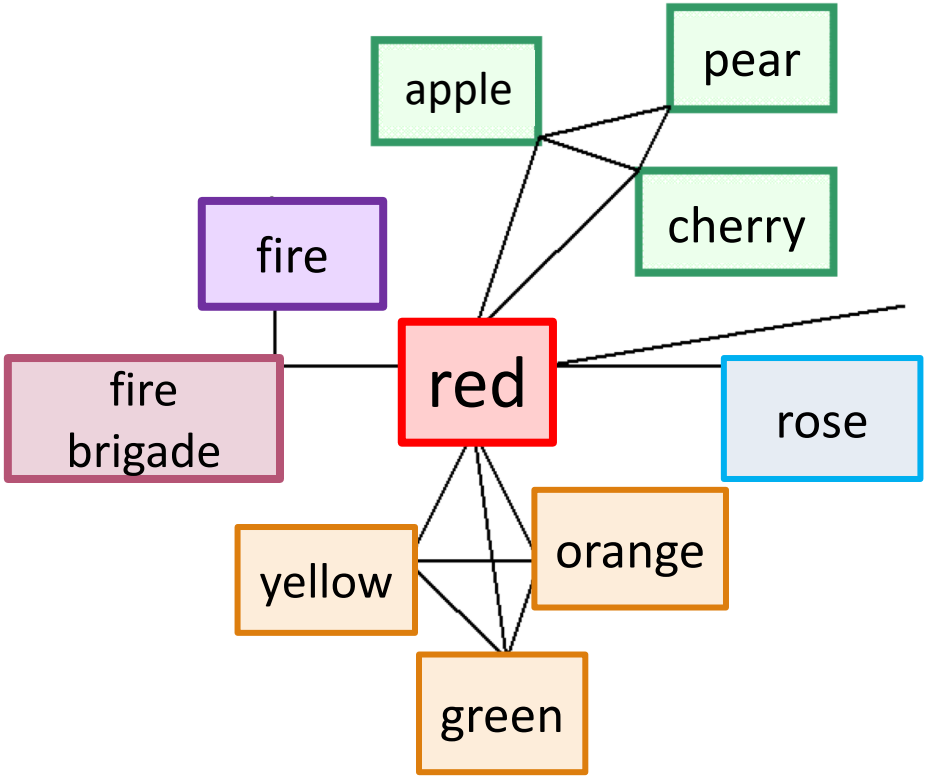
What do you associate with the word "red"?

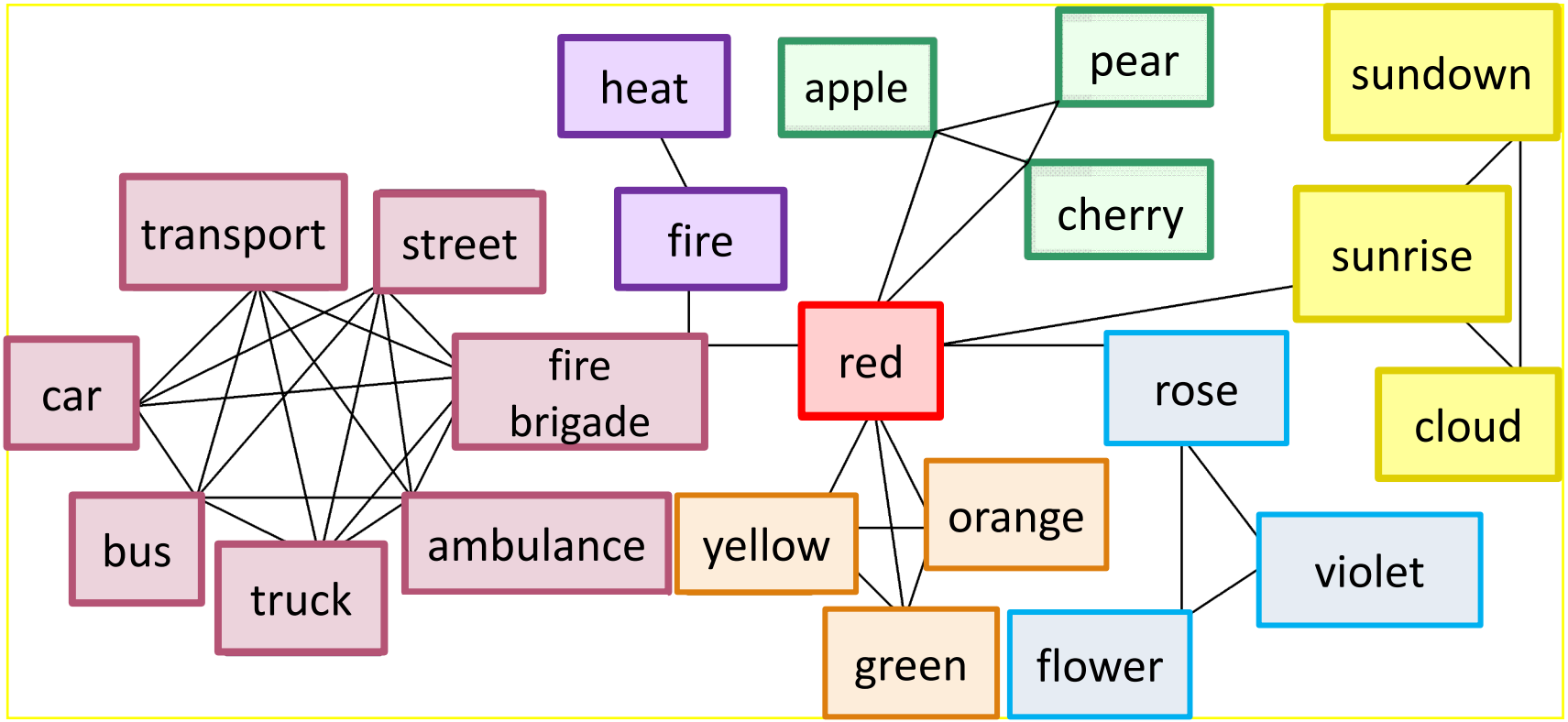
red

Cognitive networks



For each one of these words, you can probably think of more words

Cognitive networks



Associative networks

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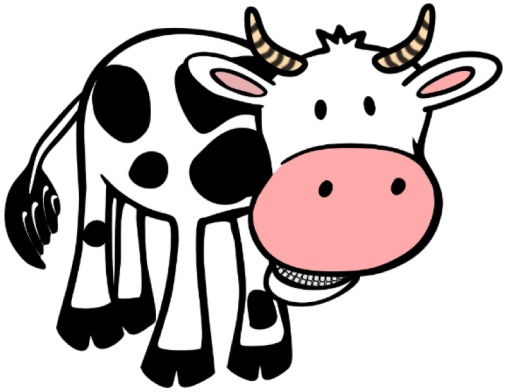
To help you understand this connection, here's a short exercise:

Please answer the following questions very quickly and without thinking too much

Questions

????

What does the cow drink?



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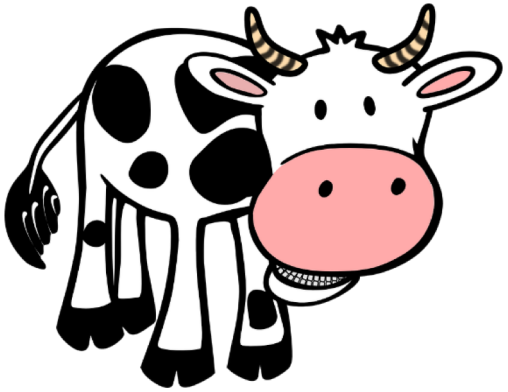
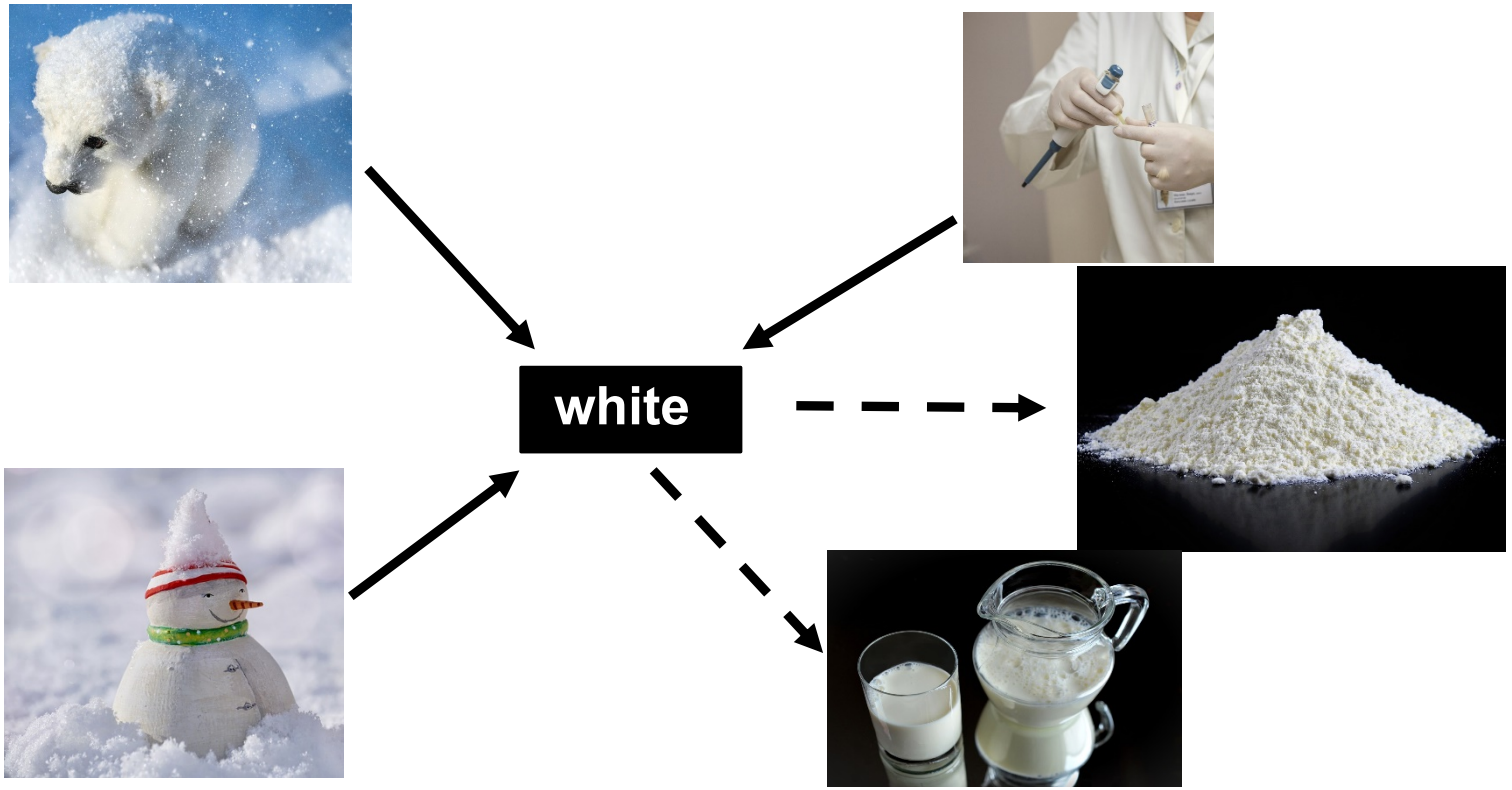
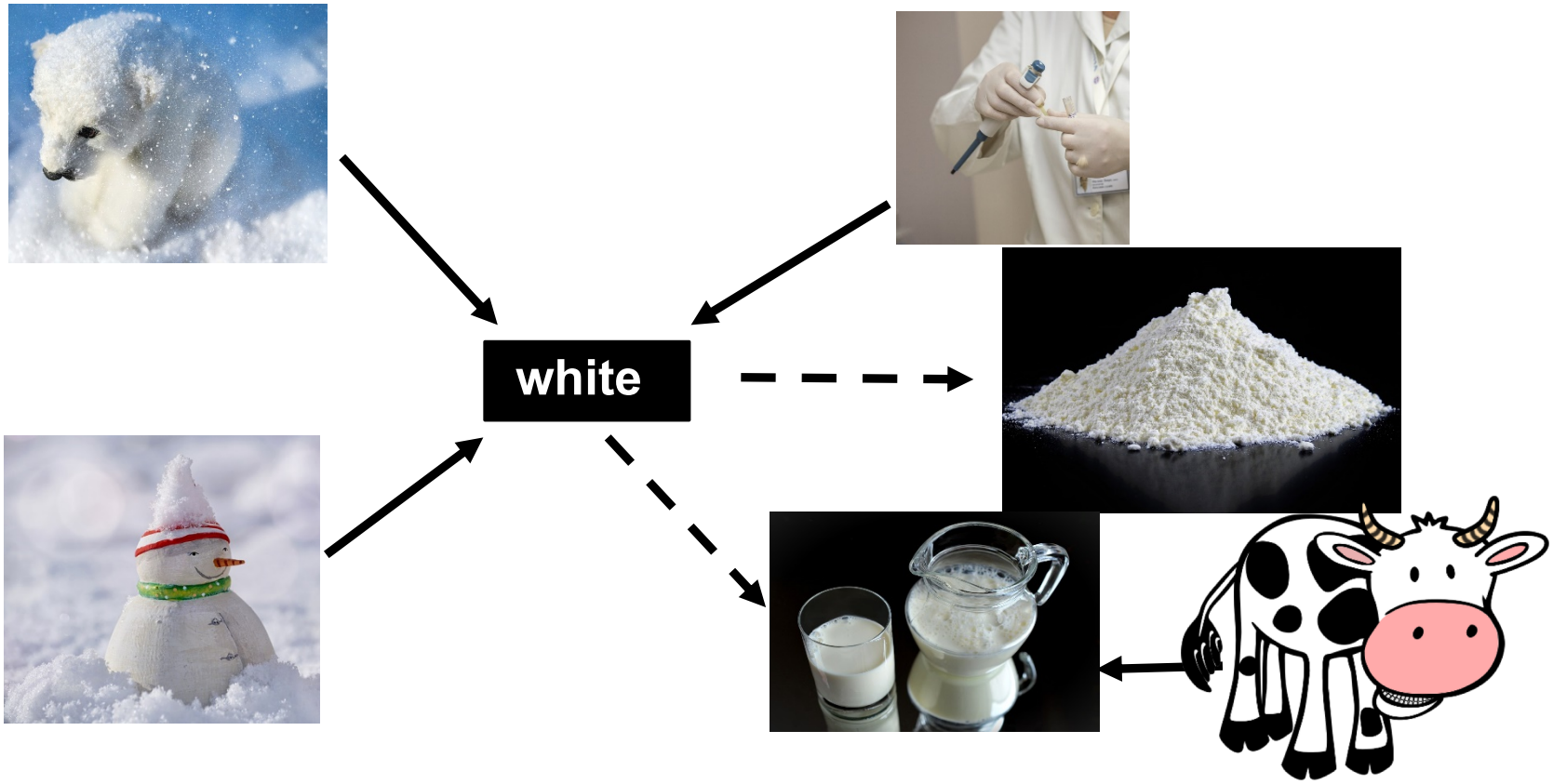


Milk??

Terms are „activated"…



..and retrieved more quickly under time pressure



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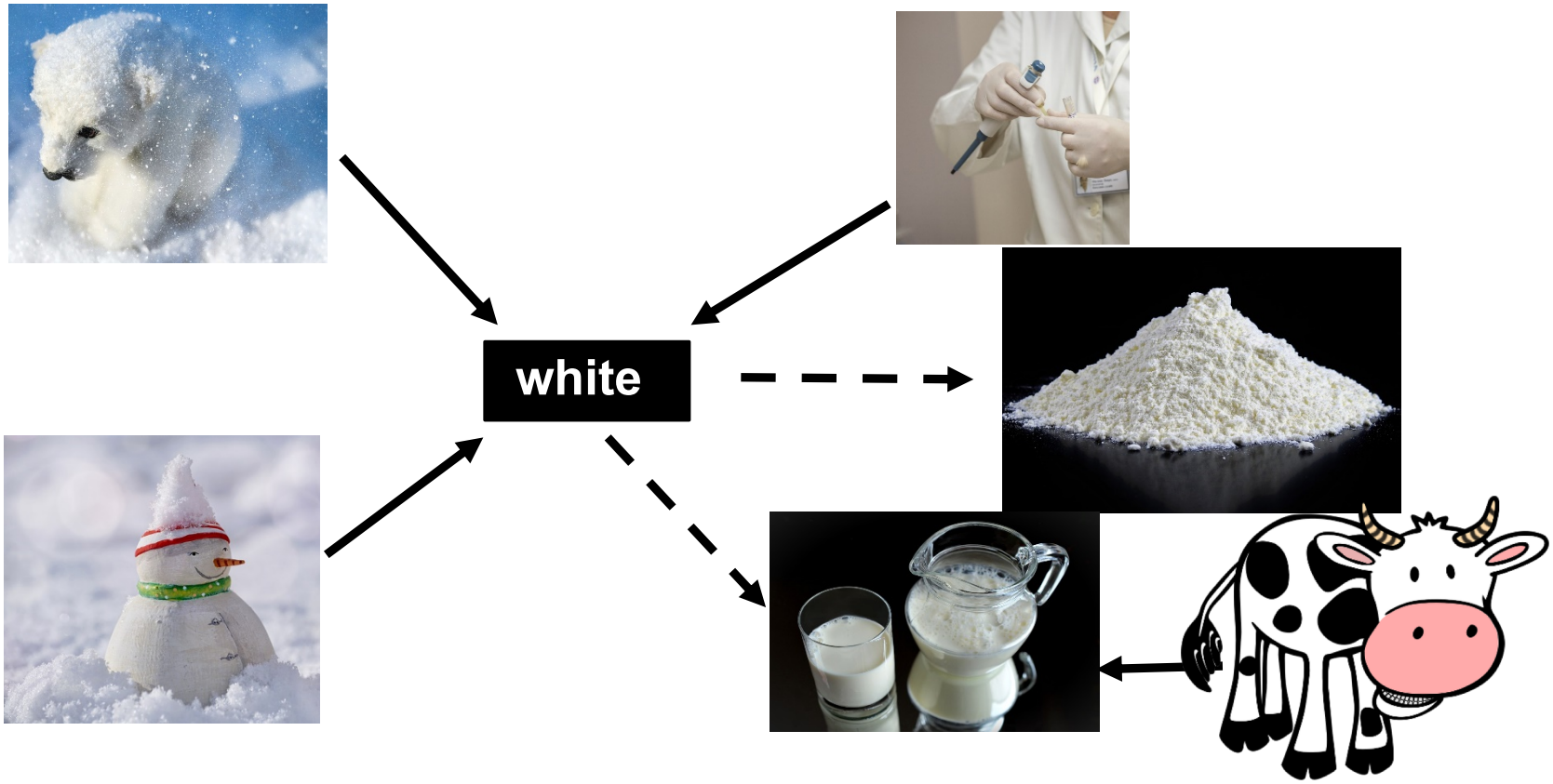
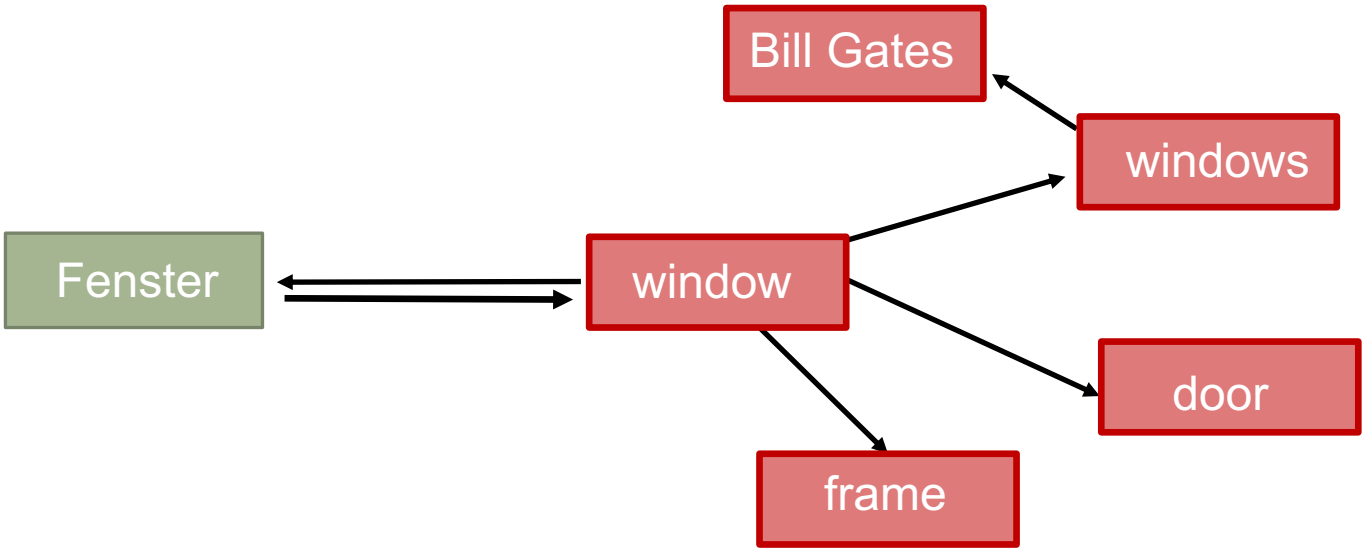


- If a cognition (in this case “white”) is activated, the "associated" cognitions are also activated and may be recalled more quickly

Strength of association 1

- The strength of association between 2 cognitions can be mutually different



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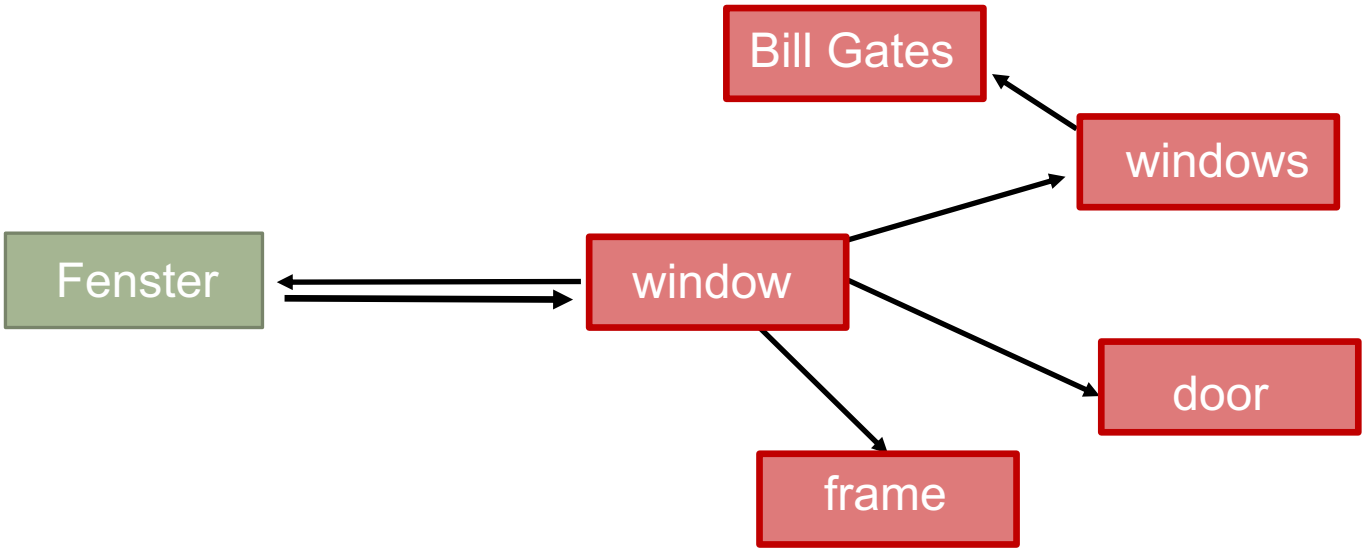

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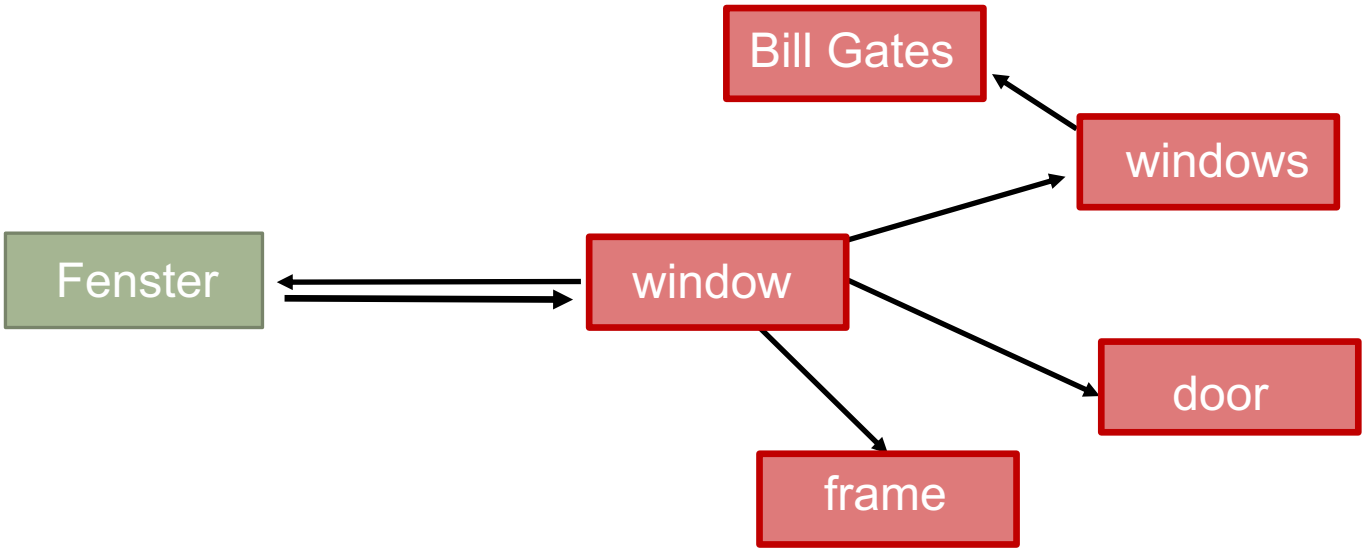
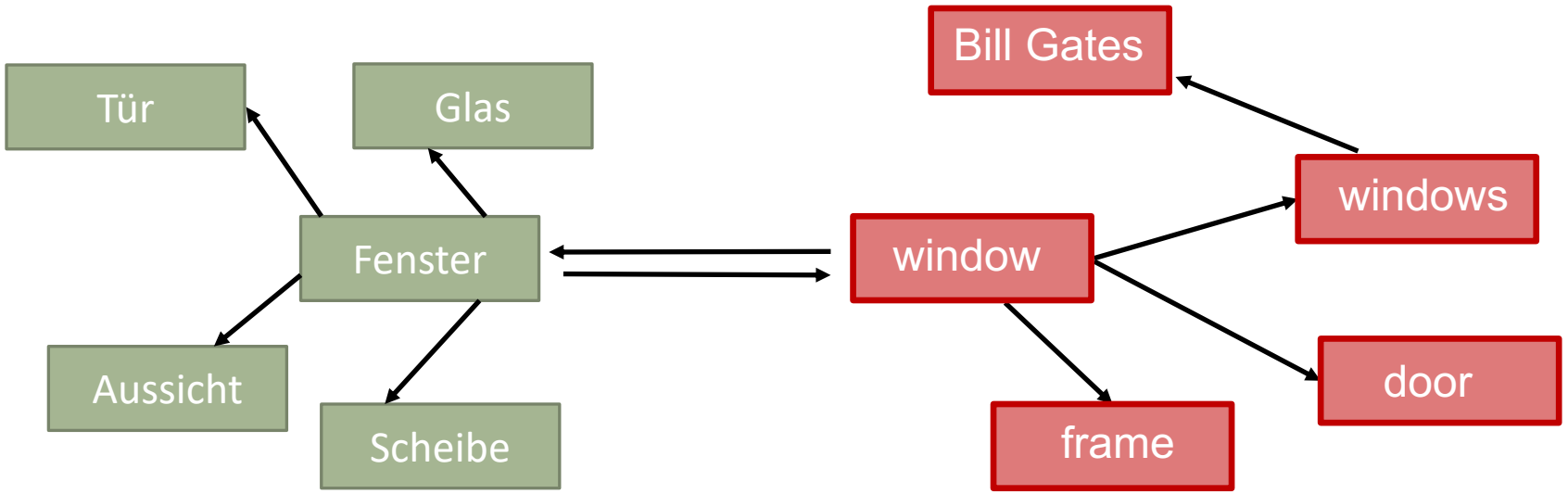
→ The more different associations there are to and from a cognition, the lower is the individual link strength *(fan effect)*



Strength of association 2

The strength of the association between two cognitions also depends on how often they occur together



Strength of association 2

The strength of the association between two cognitions also depends on how often they occur together

- The more frequently cognitions are thought or imagined together, the stronger the linkage is

Biased cognitive networks

- Cognitions that occur together very often are particularly strongly associated

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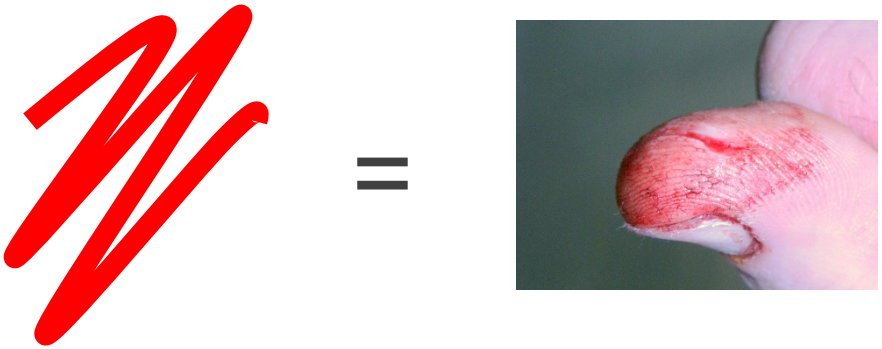

Biased toward obsessive fear

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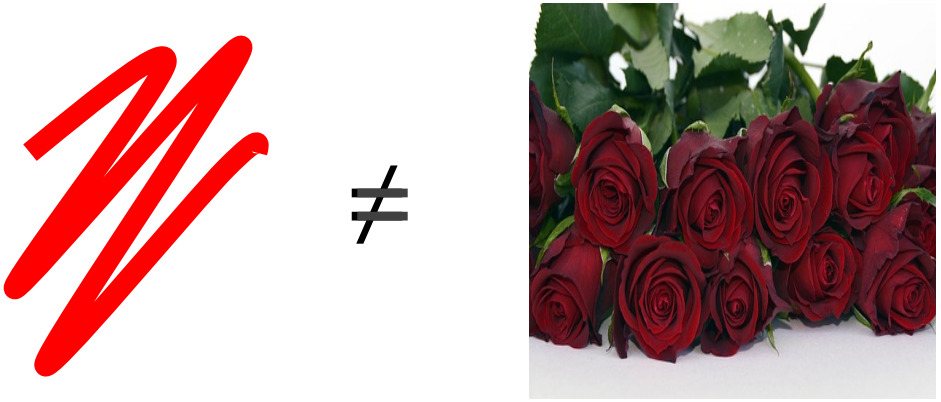

Decreased access to alternative associations

Other examples

- The **number 13** is now only associated with *misfortune, danger, caution, being unlucky*...

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  - … and not with *Alex Rodríguez, teenager* or similar

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- The word **cancer** is only associated with *the fear of disease, death, dying, infirmity and pain*...
  - …. and not with *the zodiac sign or the animal on the beach*

Other examples

- The image of a knife is only associated with negative associations such as danger, blood, killing or murder...

Other examples

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  - … and no longer with neutral associations such as *spoon, fork, peanut butter or bread*

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- The image of a knife is only associated with negative associations such as danger, blood, killing or murder...
  - … and no longer with neutral associations such as *spoon, fork, peanut butter or bread*
- And so on…

What's the point of all this?

- Cognitive networks may be biased toward OCD-relevant information in individuals with OCD

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  - No surprise that obsessions are very quickly retrievable and become more and more intrusive

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  - No surprise that obsessions are very quickly retrievable and become more and more intrusive
- However, the networks can be expanded through practice
  - By finding new associations or reactivating and training old ones
- For this purpose, a technique called **"association splitting"** was developed

Association splitting

- Aim:

Association splitting

- Aim:
  - Detaching from the entrenched OCD focused thoughts

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- Aim:
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  - Weaken the associations

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  - So that it is easier to move thoughts away from the subject of OCD and expand in other directions
- For this purpose, **new** OCD-irrelevant associations have to be made, or old/dormant OCD-irrelevant associations have to be reactivated
- In the long term, this should lead to a decrease in OCD symptomatology

Association splitting – how does it work?

1. **First, select a key term representative of your OCD fears**

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1. **First, select a key term representative of your OCD fears**
2. **Write down at least 3 alternative associations for this term**
   - These should be neutral or positive and have nothing to do with the OCD fears and thus, redirect out of the OCD network
   - You can create all kinds of associations, even ones that rhyme or are of unique significance to you

blood

snow white

„…Lips as red as blood …“

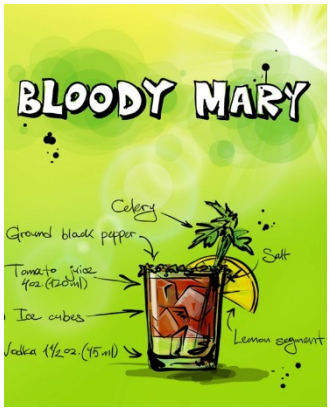
flood

steak

blood oranges

blood brothers

bloody Mary



Mud (rhyme)

fire

firework

campfire

fireplace

firetruck

knife

fork

wife (rhyme)

spread butter

spoon

plate

Examples

Own examples?

What can help?

- Rehearse the new associations (e.g., *knife – spoon; knife – fork; knife – jam*)

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- Rehearse the new associations (e.g., *knife – spoon; knife – fork; knife – jam*)
- Do this several times in a row (maximum 10 minutes a day)

What can help?

- Rehearse the new associations (e.g., *knife – spoon; knife – fork; knife – jam*)
- Do this several times in a row (maximum 10 minutes a day)
  - What is important is the direction of the association, that is: *knife –> spoon*; *knife –> fork; knife –> jam* and not the other way around!

What can help?

- Perform the exercises several times throughout the day, but **not while you're actively having obsessions**

What can help?

- Perform the exercises several times throughout the day, but **not while you're actively having obsessions**
  - This prevents the new associations from being used as a distraction or compulsion in response to your obsessions

Learning Objectives

- OCD relevant stimuli are often recognized more quickly and attract attention

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- OCD relevant stimuli are often recognized more quickly and attract attention
- You can learn to focus attention: Try to direct your attention to other information or stimuli

Learning Objectives

- OCD relevant stimuli are often recognized more quickly and attract attention
- You can learn to focus attention: Try to direct your attention to other information or stimuli
- Our thinking is organized like a network and cognitions are linked to each other

Learning Objectives

- OCD relevant stimuli are often recognized more quickly and attract attention
- You can learn to focus attention: Try to direct your attention to other information or stimuli
- Our thinking is organized like a network and cognitions are linked to each other
  - For people with OCD, networks are often strongly biased toward OCD-relevant information

Learning Objectives

- OCD relevant stimuli are often recognized more quickly and attract attention
- You can learn to focus attention: Try to direct your attention to other information or stimuli
- Our thinking is organized like a network and cognitions are linked to each other
  - For people with OCD, networks are often strongly biased toward OCD-relevant information
- The biased networks can be expanded through practice

Learning Objectives

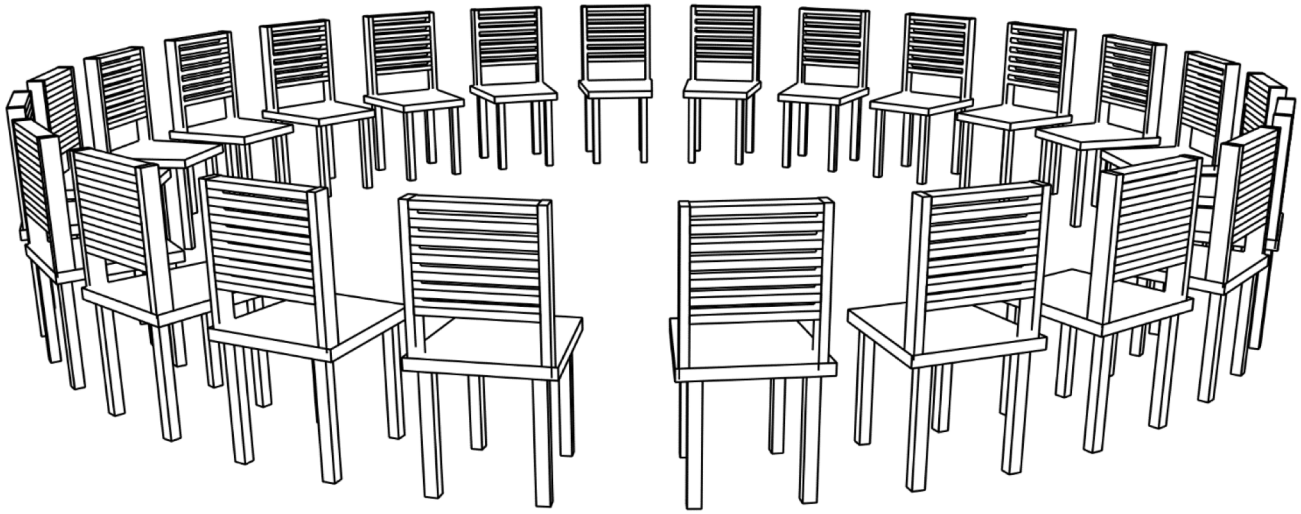
- "Association splitting" helps to reduce OCD related thoughts by creating new OCD-irrelevant associations or reactivating old/dormant ones

Learning Objectives

- "Association splitting" helps to reduce OCD related thoughts by creating new OCD-irrelevant associations or reactivating old/dormant ones
- By creating new associations or reactivating and training old ones

Closing round

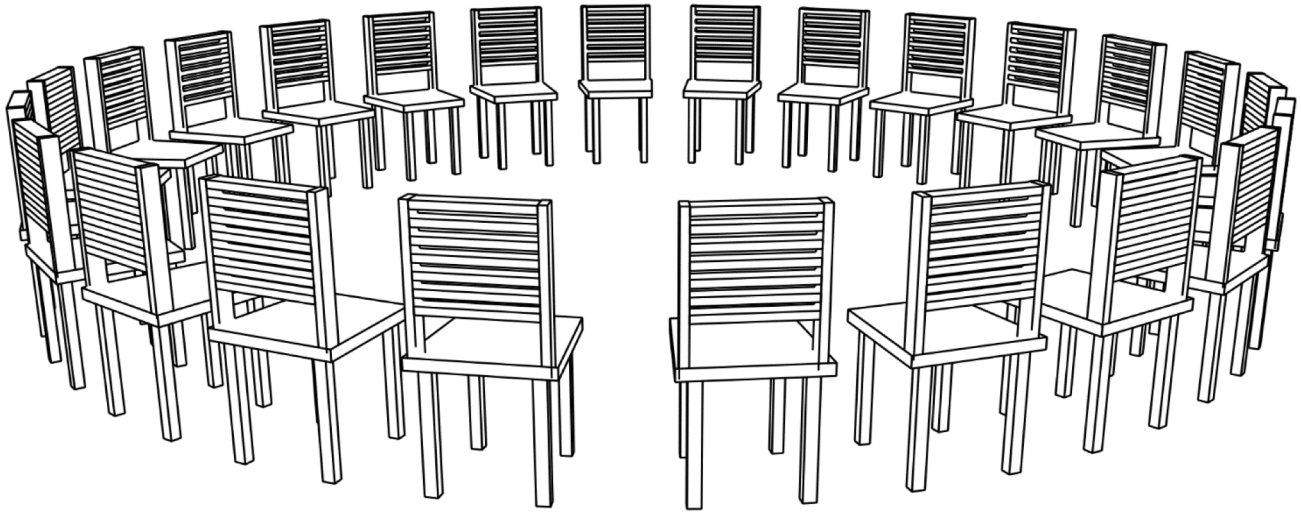
What have I learned today?

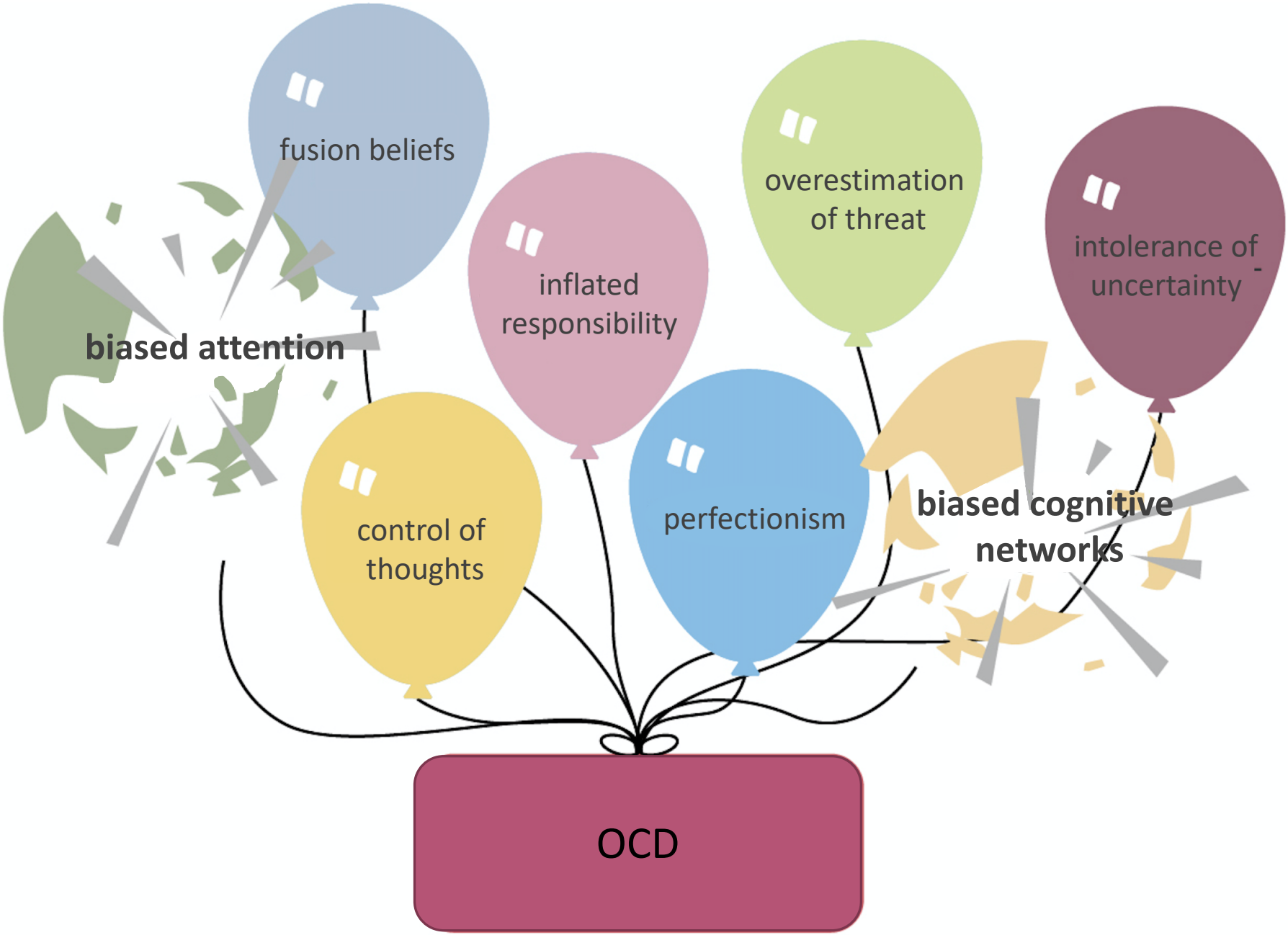


Closing round

What have I learned today?

Which of the presented strategies do I want to practice this week?




fusion beliefs
overestimation of threat
intolerance of uncertainty
inflated responsibility
biased attention
control of thoughts
perfectionism
biased cognitive networks
OCD

Thank you very much, that's it for today.

MODULE 8: BIASED ATTENTION AND BIASED COGNITIVE NETWORKS

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m. anima	flickr	Lost in the maze	PP	Labyrinth 1
Virtual EyeSee	flickr	Circular Maze	PP	Labyrinth 2
openDemocracy	flickr	headache	PP	Denken/ Kopfschmerz
Jared Cherup	flickr	Firetruck	CC	Firetruck

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Christopher Lau	AG Neuropsy-chologie	Küche	PP	Küche
BreaW	pixabay	Auge	CC	Auge 1
Alexas_Fotos	pixabay	Auge	CC	Auge 2
Geralt	Pixabay	Ohr	CC	Ohr

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PublicDomainPictures	pixabay	Erwachsene	CC	Riechen
KarinKarin	pixabay	Spielzeugauto	CC	Spielzeugauto
jill111	pixabay	Frühling	CC	Vogel
LionsRise	pixabay	Blume	CC	Blume

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Couleur	pixabay	Eisbär	CC	Eisbär
DarkoStojanovic	pixabay	Mediziner	CC	Mediziner
Suju	pixabay	Schneemann	CC	Schneemann
Clker-Free-Vector-Images	pixabay	Kuh	CC	Kuh

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Bru-nO	pixabay	Mehl	CC	Mehl
Congerdesign	pixabay	Milch	CC	Milch
Labormikro	flickr	Schnitt in den Daumen…	PP	Daumen
Annca	pixabay	Rosen	CC	Rosen

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WikiImages	pixabay	Krabbe	CC	Krabbe
geralt	pixabay	Gesicht	CC	Gesicht
455992	pixabay	Schneewittchen	CC	Schneewittchen 1
tookapic	pixabay	Schneewittchen	CC	Schneewittchen 2

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BenHaenchen	Wikimedia	Die kleinsten Blutsbrüder Deutschlands:	PP	Winnetou
gate74	pixabay	Fleisch	CC	Fleisch
Alexas_Fotos	pixabay	Bloody Mary	CC	Bloody Mary
Quangpraha	pixabay	Hintergrund	CC	Meer

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silviarita	pixabay	Obst	CC	Obst
clurross	flickr	wet mud	CC	mud
Geralt	pixabay	Feuerwerkskörper	CC	Feuerwerkskörper

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rawpixel	pixabay	Feiern	CC	Kamin
Free-Photos	pixabay	Lagerfeuer	CC	Lagerfeuer
RoAll	pixabay	Event	CC	Anfeuern
KlausHausmann	pixabay	Star	CC	KlausHausmann

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AliciaDixiecup	wikimedia	GOD SAVE THE SHEEN.	CC	Charlie Sheen
Silvia Klippert (painting) / John Klippert (photo)	wikimedia	painting	CC	Rolling Stones
Stokpic	pixabay	Paar	CC	Paar

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aungkarns	openclipart	television,TV	CC	TV
Christopher Lau	AG Neuropsychologie	Sex and the city	PP	Sex and the city
Stefan Brending	Wikimdia	Westernhagen	PP	Westernhagen 1

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silberfuchs	pixabay	Löffel	CC	Löffel
silberfuchs	Pixabay	Besteck	CC	Messer
photofree.ga	openclipart	Circle of Chairs 2nd perspective	CC	Stuhlkreis