



Metacognitive Training (MCT)

# MCT 7 B – Jumping to Conclusions II

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## Hasty Conclusions

We often draw conclusions without knowing the full truth.

• Reasons/advantages: ???

• Disadvantages: ???



## Hasty Conclusions

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- Reasons/advantages: saving time, makes one feel safe, may appear determined and competent to others ("A wrong decision is better than no decision").
- Disadvantages: ???



## Hasty Conclusions

We often draw conclusions without knowing the full truth.

- Reasons/advantages: saving time, makes one feel safe, may appear determined and competent to others ("A wrong decision is better than no decision").
- Disadvantages: risk of making an incorrect and dangerous decision ...



When?	Example
when the problem is very complex	???
when we have some previous experience, from which we generalize	???
when the decision does not really matter	???



When?	Example
when the problem is very complex	When buying a car, it is impossible to compare all models and consider all parameters (price, mileage etc.). You have to make a selection.
when we have some previous experience, from which we generalize	???
when the decision does not really matter	???



When?	Example
when the problem is very complex	When buying a car, it is impossible to compare all models and consider all parameters (price, mileage etc.). You have to make a selection.
when we have some previous experience, from which we generalize	Over-generalizations can lead to prejudice ("seen one, seen 'em all").
when the decision does not really matter	???



When?	Example
when the problem is very complex	When buying a car, it is impossible to compare all models and consider all parameters (price, mileage etc.). You have to make a selection.
when we have some previous experience, from which we generalize	Over-generalizations can lead to prejudice ("seen one, seen 'em all").
when the decision does not really matter	Choosing a type of a cake, color of socks, type of lunch etc



# Hasty conclusions "in action"

Domain	Example
Exaggerated worries about health	<ul> <li>People with exaggerated worries about their health are often prematurely convinced that some minor and often unspecific symptoms (e.g. mole) indicate severe disorders (e.g. skin cancer).</li> </ul>
Imposter	<ul> <li>Under the pseudonym Anna Delvey, the German-Russian Anna Sorokin pretended to be a millionaire's daughter in Manhattan in 2012. Among other crimes, she defrauded banks and friends of a total of about \$275,000. She blamed her inability to repay loans on, for example, a dispute with her father that was keeping her from accessing his funds. Her self-confidence led friends and business partners to trust her blindly. Only when the unpaid bills began to pile up was Sorokin charged and convicted of theft and fraud. A healthy amount of skepticism about her identity, statements, and ability to repay loans might have exposed her financial situation earlier.</li> </ul>



### Urban legends –

(for an alternative exercise, see end of presentation)

Is there any connection between the cigarette brand "Lucky Strike" and the atomic bombing of Japan?

The design of the cigarette packet led to	Legend	For and against	"Evidence"
rumors that the brand "Lucky Strike" has something to do with the dropping of the atomic bomb on Japan.  Against: ???	cigarette packet led to rumors that the brand "Lucky Strike" has something to do with the dropping of the atomic bomb on		LUCKY STRIKE BYOLES



## Urban legends –

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Legend	For and against	"Evidence"
The design of the cigarette packet led to rumors that the brand "Lucky Strike" has something to do with the dropping of the atomic bomb on Japan.	<ul> <li>For:</li> <li>The japanese flag consists of – similar to the packet – a red circle on a white background.</li> <li>The golden circle could illustrate radioactive contamination.</li> <li>"Lucky Strike" could be understood as "successful attack".</li> <li>Lucky Strike has changed the packet design during World War II. Before that, the white background was green.</li> </ul> Against: ???	Japanese flag



### Urban legends –

(for an alternative exercise, see end of presentation)

Is there any connection between the cigarette brand "Lucky Strike" and the atomic bombing of Japan?

#### For and against "Evidence" Legend The design of the For: The japanese flag consists of – similar to the packet – a red circle on a white RIGINAL SILVER cigarette packet led to background. rumors that the brand The golden circle could illustrate radioactive contamination. "Lucky Strike" has "Lucky Strike" could be understood as "successful attack". something to do with Lucky Strike has changed the packet design during World War II. Before that, the dropping of the the white background was green. atomic bomb on Japan. Against: The golden circle was already on the old packet. The packet design had already been changed in 1940/1941 for marketing reasons, whereas the dropping of the atomic bomb was in 1945. The brand was established in the gold-digger times. The name "Lucky Strike" is registered since 1871. The early tobacco tin had a hammer pointing to Japanese flag heaven on it – a symbol for the "lucky strike" of a gold-digger.



Urban legends –

Is there any connection between the cigarette brand "Lucky Strike" and the atomic

bombing of japan?



No!



## How do these conspiracy theories arise?

555



## How do these conspiracy theories arise?

- They are often more exciting than reality!
- They are based on statements difficult to check or prove (e.g. the package stands for Japan and the golden wreath represents radioactive contamination).
- They conceal alternative explanations (e.g. that "lucky strike" also refers to a discovery).
- Legends are sometimes based on facts taken out of context. The significance of these
  details is also largely exaggerated. (The package was indeed changed during World War II,
  however, this does not per se speak in favor of the legend.)



## How do these conspiracy theories arise?

- There are numerous examples in history where minorities and outcasts were falsely blamed for uncontrollable, catastrophic events. For example, in medieval times a poor harvest was often blamed on witchcraft or religious minorities.
- These simple explanations reduced tension and fear and provided the illusion of control.



## Why are we doing this?

• Studies show that many people with psychosis (but not all!) make decisions on the basis of little information. This type of decision making can easily lead to errors, compared to a type involving careful consideration of all available information.



## Why are we doing this?

- Studies show that many people with psychosis (but not all!) make decisions on the basis
  of little information. This type of decision making can easily lead to errors, compared to a
  type involving careful consideration of all available information.
- The perception of reality for many (but not all!) people with psychosis is altered. Unlikely
  interpretations are considered that most other people would disregard.



# How jumping to conclusions promotes misinterpretations during psychosis – examples

Event	Explanation during psychosis	Other explanations
Food tastes strange.	Food has been poisoned.	Badly cooked, ingredients are off.
Your girlfriend smells different when she comes home in the evening.	You are convinced she cheated on you.	Your girlfriend has a new perfume and expects compliments rather than accusations!
The radio plays "Hero" by Mariah Carey a number of times.	This is a secret sign you are chosen to save the world.	Radio station plays pop music.

Can anyone contribute a short personal experience?





• In the following exercises you will be shown different paintings. Please try to identify the correct title for each painting and rule out "misfits".



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- Discuss the *pros* and *cons* for each of the interpretations.



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- Discuss the *pros* and *cons* for each of the interpretations.
- Please also state the degree of confidence in your judgment.



- In the following exercises you will be shown different paintings. Please try to identify the correct title for each painting and rule out "misfits".
- Discuss the pros and cons for each of the interpretations.
- Please also state the degree of confidence in your judgment.
- Pay special attention to features that clearly rule out one interpretation.





- a. Good news
- b. The dead child
- c. The conscription
- d. Sad message





- a. Good news
- b. The dead child
- c. The conscription
- d. Sad message (Peter Fendi, 1838)





- a. Education
- b. Soup at the monastery
- c. Before church service
- d. The conversion





- a. Education
- b. Soup at the monastery (Anton Mangold, 1888)
- c. Before church service
- d. The conversion





- a. The war
- b. Annunciation of the arrival of Christ
- c. The black horse
- d. The rocking horse





- a. The war (Henri Julien F. Rousseau, 1894)
- b. Annunciation of the arrival of Christ
- c. The black horse
- d. The rocking horse





- a. Poisoning
- b. Why did I marry him?
- c. Suicide
- d. The desperate mother





- a. Poisoning
- b. Why did I marry him? (Murray, ca. 1940)
- c. Suicide
- d. The desperate mother





- a. Riot
- b. Market day
- c. The cockaigne
- d. Childrens' games





- a. Riot
- b. Market day
- c. The cockaigne
- d. Childrens' games (Pieter d. Ä. Bruegel, 1560)



## Optional: Videoclip

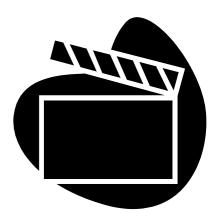
Video clip presentations that address today's topic are available at the following web site:

http://www.uke.de/mct\_videos

After the video, you may discuss how it is related to today's topic.

#### [for trainers:

Some movie clips contain language that may not be appropriate for all audiences and across all cultures. Please carefully pre-screen videos before showing]







- a. Forbidden gamble
- b. Cheater with the diamond ace
- c. The poison
- d. The countess gambles away house and yard





- a. Forbidden gamble
- b. Cheater with the diamond ace (Georges de la Tour, 1630)
- c. The poison
- d. The countess gambles away house and yard





- a. Ravaging the graveyard
- b. Two men contemplating the moon
- c. Vampire slayer
- d. Eclipse of the sun





- a. Ravaging the graveyard
- b. Two men contemplating the moon (Caspar David Friedrich, 1819)
- c. Vampire slayer
- d. Eclipse of the sun





- a. Rest at the edge of the wood
- b. The escape
- c. Exhaustion
- d. The injured





- a. Rest at the edge of the wood (F.G. Waldmüller, 1793-1865)
- b. The escape
- c. Exhaustion
- d. The injured





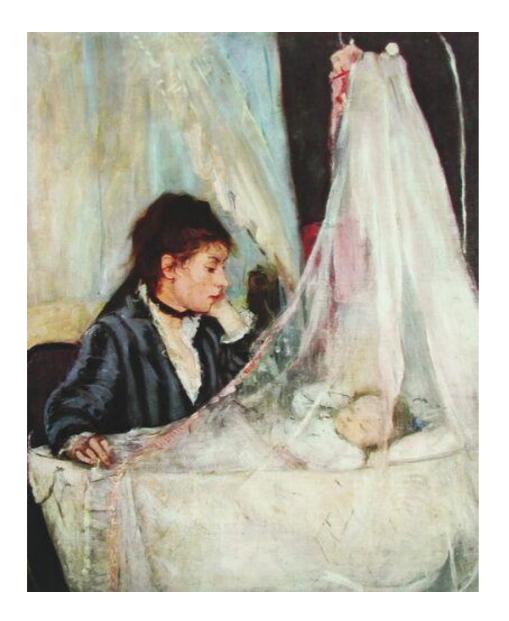
- a. Last meal
- b. Feeding rabbits
- c. Playmates
- d. Easter Sunday





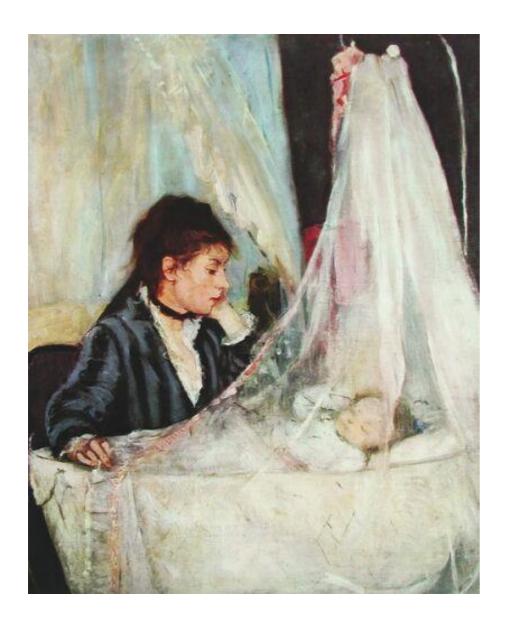
- a. Last meal
- b. Feeding rabbits (Felix Schlesinger, 1833-1910)
- c. Playmates
- d. Easter Sunday





- a. Breath of death
- b. The dying child
- c. Lullaby
- d. Mother at the cradle





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- c. Lullaby
- d. Mother at the cradle (Morisot Berthe, 1872)





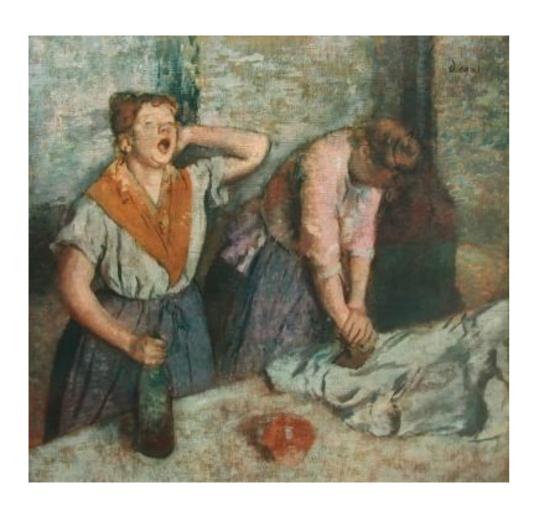
- a. Asking for a dance
- b. Neck massage
- c. Dressing
- d. Caught red-handed





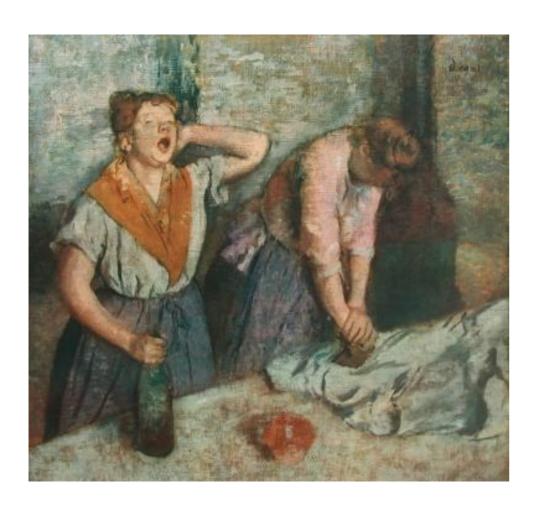
- a. Asking for a dance
- b. Neck massage
- c. Dressing (Joseph Caraud, 1868)
- d. Caught red-handed





- a. The alcoholics
- b. Reanimation
- c. Cleaning women
- d. Ironing women





- a. The alcoholics
- b. Reanimation
- c. Cleaning women
- d. Ironing women (Edgar Degas, 1884)





- a. After the harvest
- b. Land of cockaigne
- c. Beheaded chicken
- d. Food poisoning





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- a. Sorcery
- b. Amazement
- c. The travelling preacher
- d. The juggler





- a. Sorcery
- b. Amazement
- c. The travelling preacher
- d. The juggler (Hieronymus Bosch, 1480)





- a. Funeral feast
- b. The prayer
- c. Lunch
- d. Harangue





- a. Funeral feast
- b. The prayer
- c. Lunch (Albin Egger-Lienz, 1910)
- d. Harangue





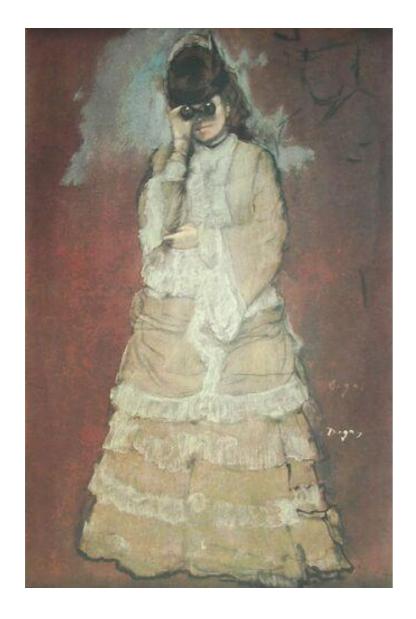
- a. Girl drinking wine, with two cavaliers
- b. The proposal
- c. The twins
- d. The festive dinner





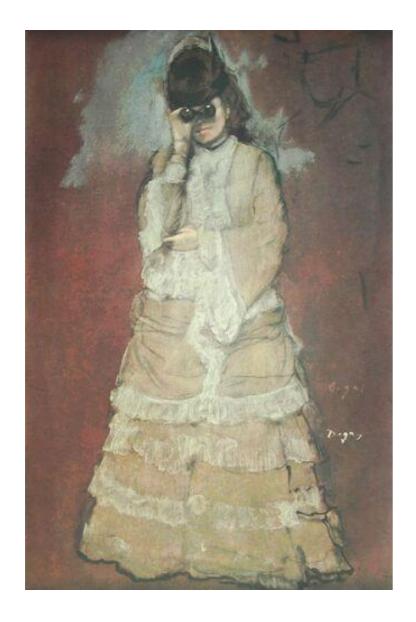
- a. Girl drinking wine, with two cavaliers (Jan Vermeer van Delft, 1660)
- b. The proposal
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- a. Carnival in Venice
- b. Lady with opera glasses
- c. The secret agent
- d. Daemon





- a. Carnival in Venice
- b. Lady with opera glasses (Edgar Degas, 1834-1917)
- c. The secret agent
- d. Daemon





### Learning objectives:

• When judgments are important and momentous, it is better to avoid hasty decisions and consider all relevant information ("better safe than sorry").



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- Example: Someone speaks very slowly and has a motionless facial expression. *Mentally challenged? Neurological disease?*
- Be careful with hasty decisions:
   It could also be that the symptoms are caused by medication side-effects.



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   It could also be that the symptoms are caused by medication side-effects.
- For events of minor importance, we may as well react quickly (e.g. choosing a type of yogurt, type of cake).
- To err is human be prepared for the possibility that you are wrong.
- Base important decisions on solid facts. Mere guesses are "bad advisers." Always consider the consequences of a wrong judgment.



## What does this have to do with psychosis?

Many (but not all!) people with psychosis tend to jump to conclusions and form extreme judgments. This style of reasoning may be enhanced when one is under pressure and wants to let off steam.



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Example: Sheila declares that her doctor is in fact her ex-boyfriend who has been after her for years as a psychiatrist under a false identity.

Background: Both come from the same village and share the same first name.

But: This was due to chance.





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Many (but not all!) people with psychosis tend to jump to conclusions and form extreme judgments. This style of reasoning may be enhanced when one is under pressure and wants to let off steam.

Example: Sheila declares that her doctor is in fact her ex-boyfriend who has been after her for years as a psychiatrist under a false identity.

Background: Both come from the same village and share the same first name.

But: This was due to chance.

Before making serious accusations, you should collect information from as many sources as possible and discuss different explanations with persons you trust.



## Thank you for your attention!

#### *for trainers:*

Please hand out worksheets. Introduce our app COGITO (download free of charge).



www.uke.de/mct\_app









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## Jumping to conclusions "in action" – Urban legends –

Legend	Conspiracy theorists	"Evidence"
Allegedly the moon landing in 1969 never took place and was merely a fake.	Arguments Pro?	



Legend	Conspiracy theorists	"Evidence"
Allegedly the moon landing in 1969 never took place and was merely a fake.	<ol> <li>"Technological victory" in space travel competition with the Soviet Union, which had successfully launched a satellite into space earlier</li> <li>Distraction from the Vietnam-War</li> <li>NASA itself faked the moon landing for fear of governmental budget cutback</li> </ol>	



Legend	For and Against	"Evidence"
Allegedly the moon landing in 1969 never took place and was merely a fake.	For: ???	



Legend	For and Against	"Evidence"
Allegedly the moon landing in 1969 never took place and was merely a fake.	<ol> <li>"Waving flag": impossible because there is no atmosphere/weather on the moon</li> <li>Pictures of starless sky and varying shadows indicate a film studio production</li> <li>Astronaut Armstrong's radio message: He responds too quickly to president Nixon's last sentence. Radio signals need more time to be transmitted to earth than it took Armstrong to answer</li> </ol>	



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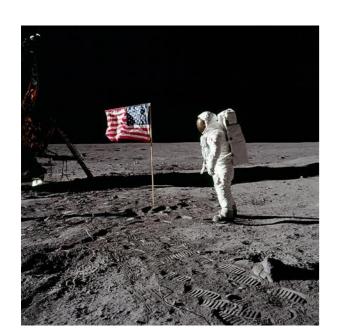
Legend	For and Against	"Evidence"
Allegedly the moon landing in 1969 never took place and was merely a fake.	<ol> <li>Against:</li> <li>The waving of the flag was caused by ramming the pole into the moon's surface and a supporting mounted crossbar</li> <li>Night photographies cannot capture weak light sources due to exposure times → no stars</li> <li>The varying shadows were caused by the uneven moon surface</li> <li>The interview had been edited in order to cover the original time delay between Nixon's and Armstrong's dialog</li> </ol>	



### Urban legends –

Was the moon landing faked by the US Government?

## No!



Director Roland Emmerich (Independence Day): "The moon landing (...) was just too good. Such a thing was impossible to stage in the 1960s. Even with today's equipment this would pose problems."

Source: German television station ZDF: "Vorsicht Verschwörung" (Beware conspiracy)



# How did this urban legend and other conspiracy theories arise?

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# How did this urban legend and other conspiracy theories arise?

- They are often more compelling than reality.
- They are based on facts that are hard to check and people believe them easily (e.g., waving flag suggests that pictures were taken on earth).
- They conceal alternative explanations (e.g., the starless sky can be explained by the technical limitations of night photography).
- Urban legends take facts out of context and push them to the limit.