

Trouble Thinking in Bipolar Disorder: Research and Treatment

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DBSA National Capital Area Chapter

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National Institute
of Mental Health

What is Cognition?

- Thinking skills
 - Pay attention
 - Remember
 - Solve problems
 - Plan

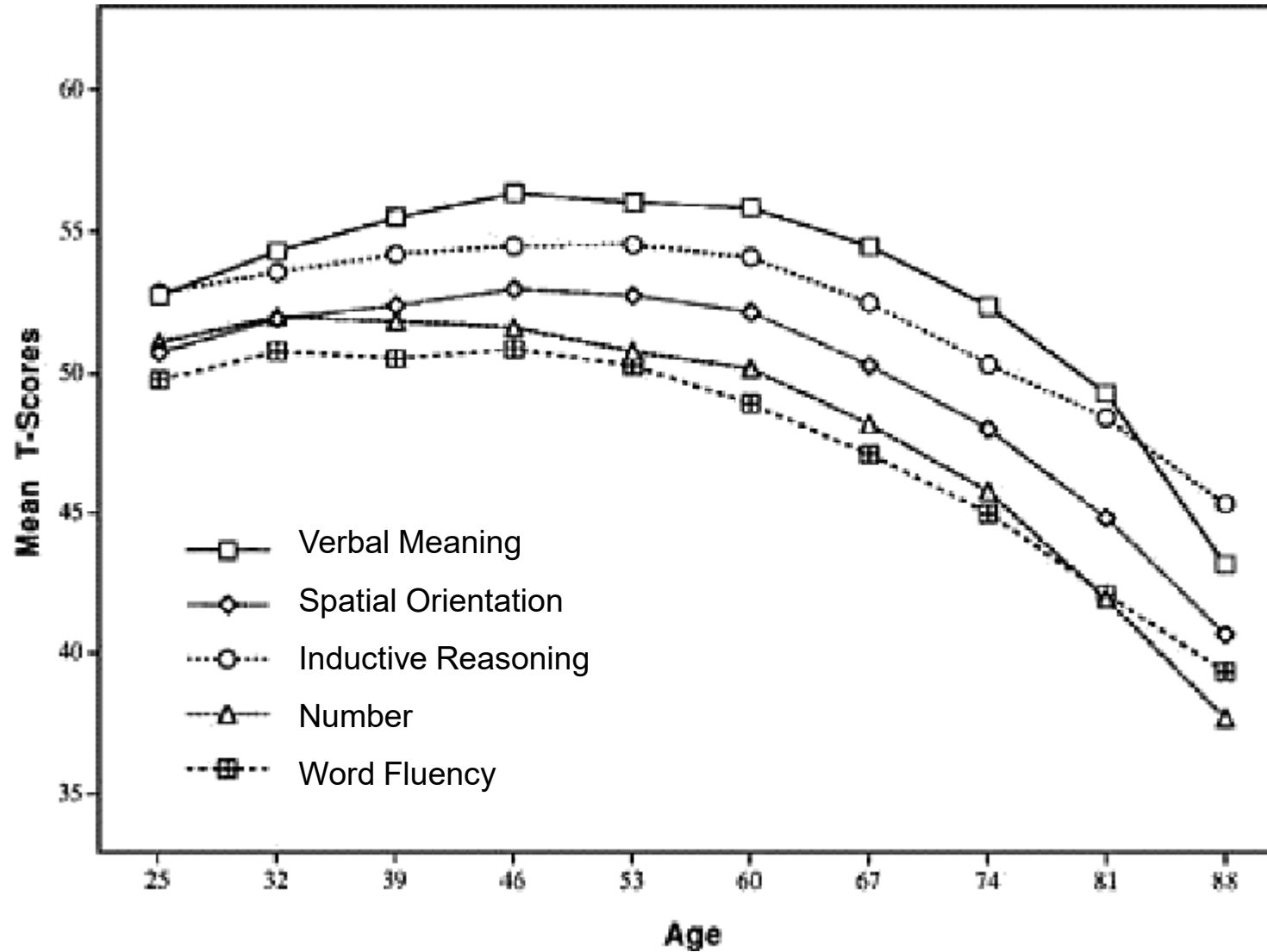
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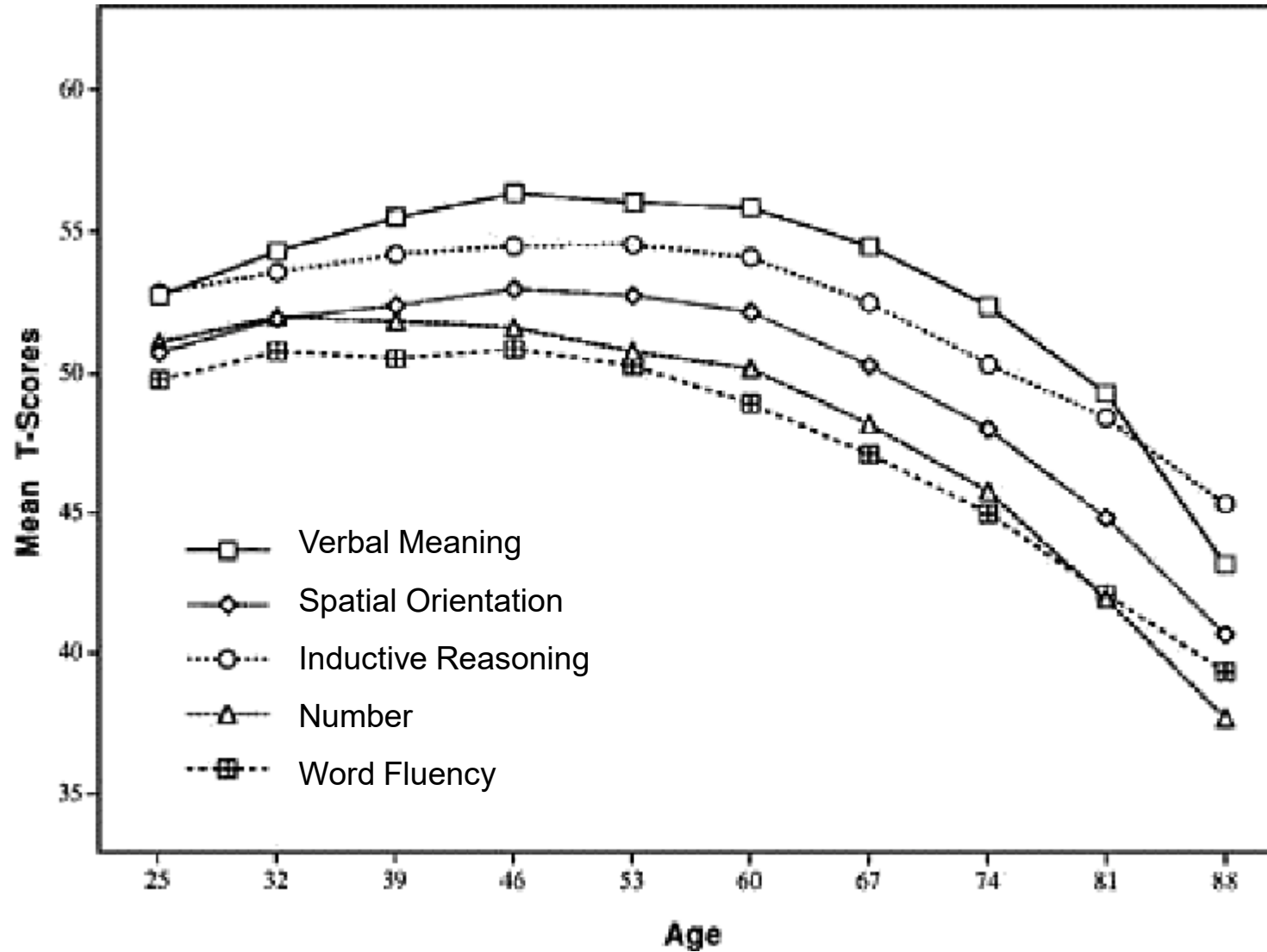
Trouble Thinking in Bipolar Disorder:

- Overview of cognition
- Cognition in Bipolar Disorder
- Cognition and daily function
- Medications that affect cognition
- Lifestyle and cognition
- Treatment
- Promising research

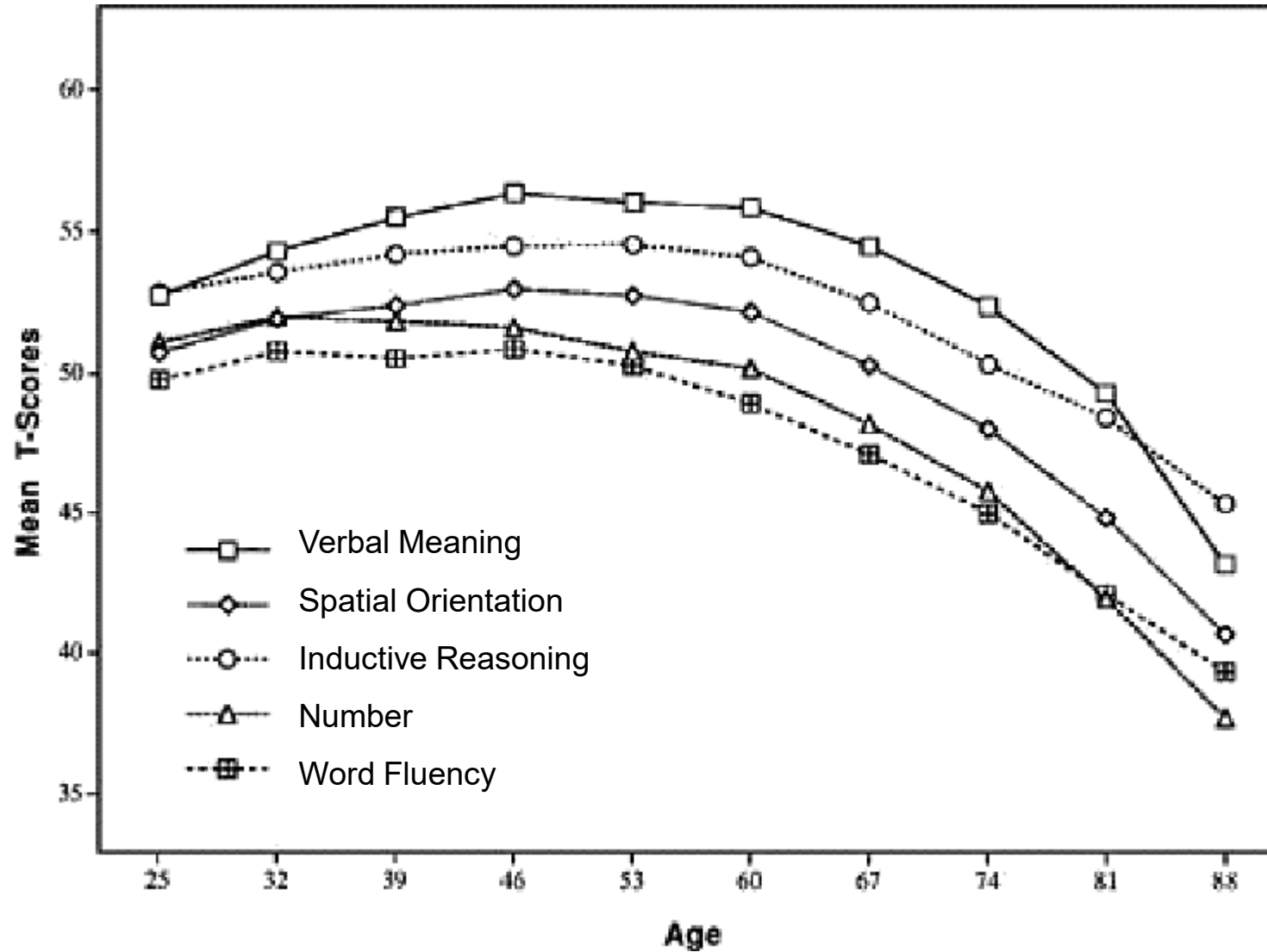
Cognition



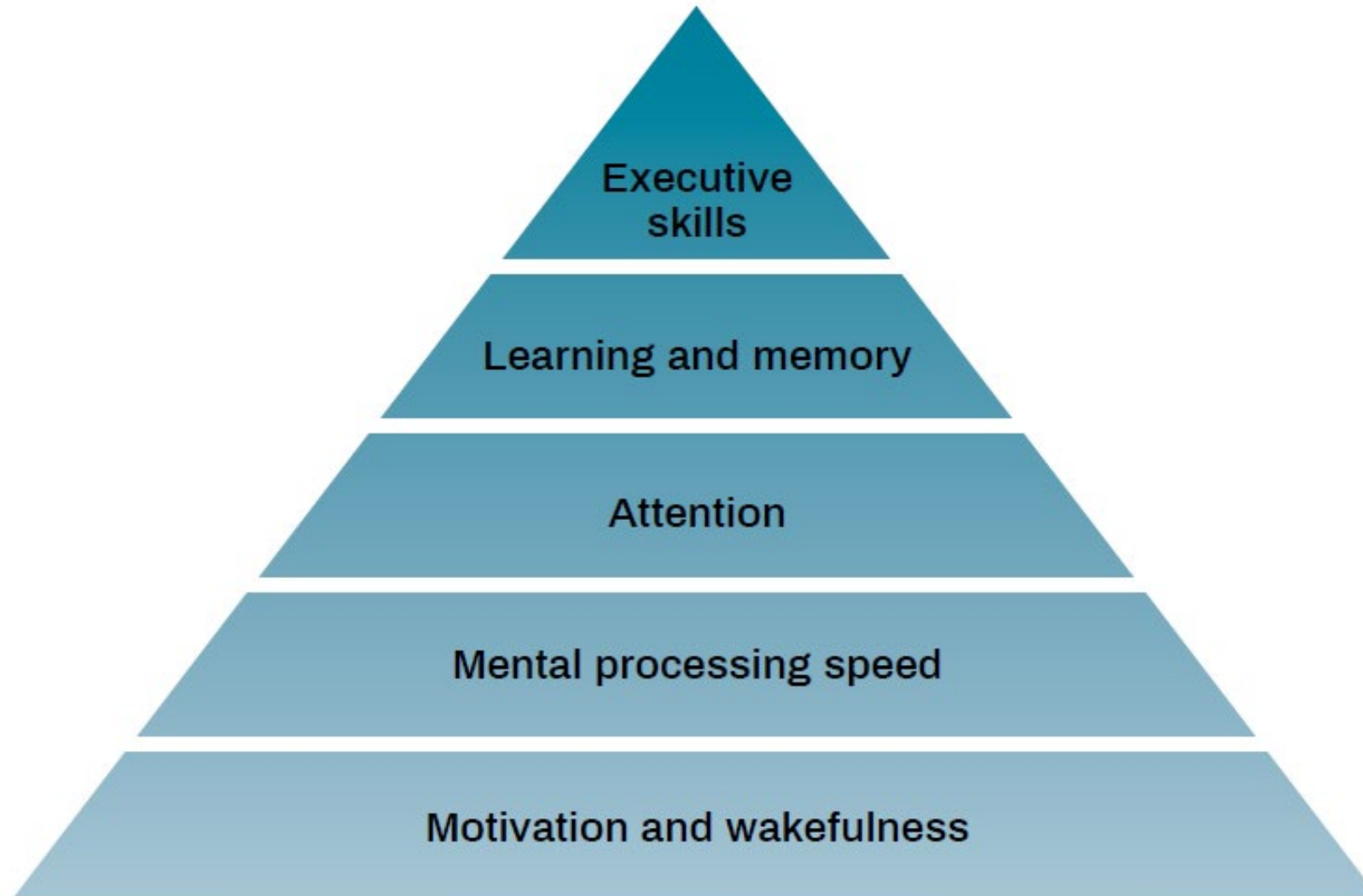
Cognition



Cognition



Cognition



Cognition

- Take place automatically
- Different aspects work together

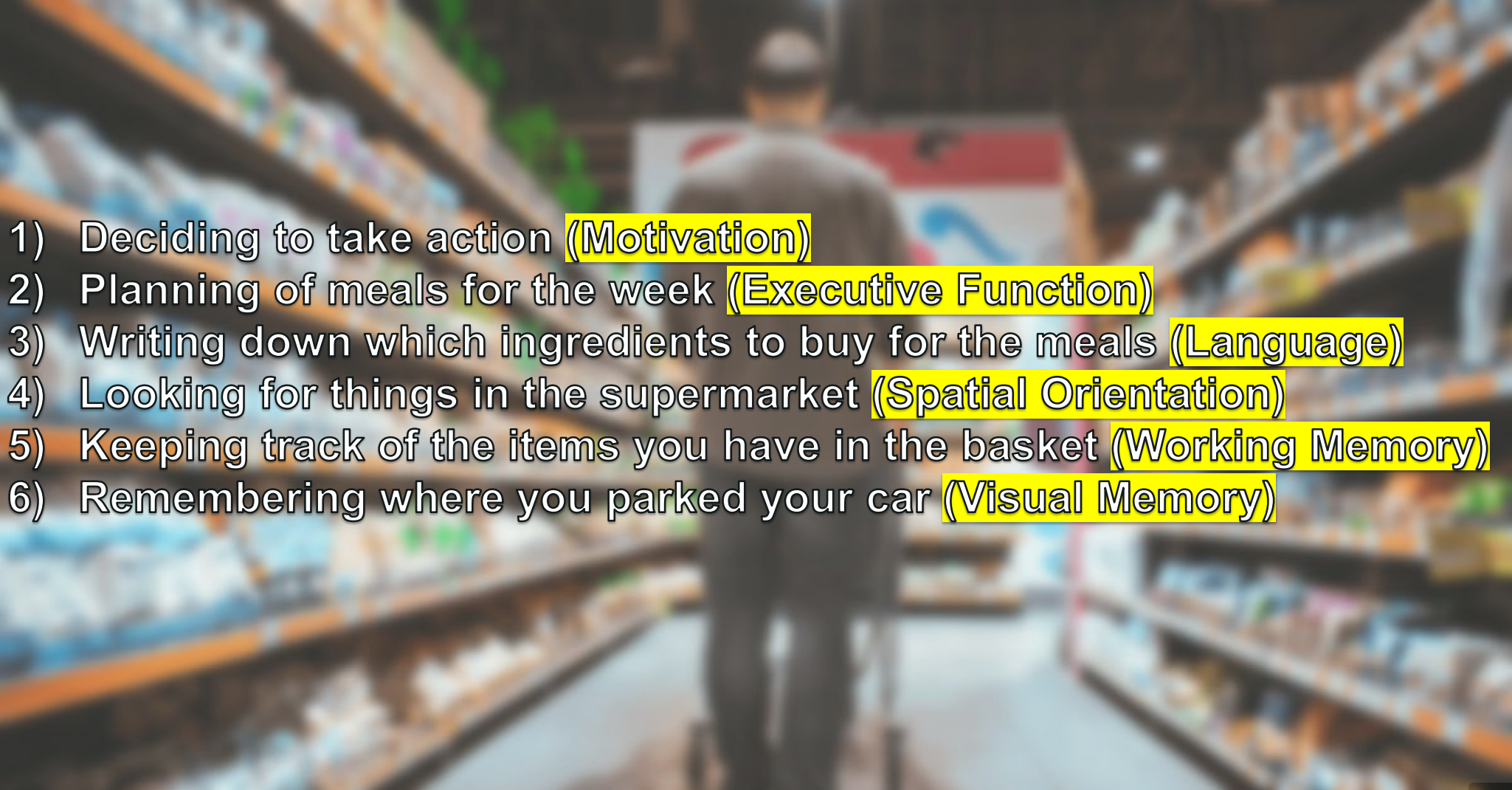
Cognition



Cognition

- 1) Deciding to take action
- 2) Planning of meals for the week
- 3) Writing down which ingredients to buy for the meals
- 4) Looking for things in the supermarket
- 5) Keeping track of the items you have in the basket
- 6) Remembering where you parked your car

Cognition

- 
- 1) Deciding to take action (Motivation)
 - 2) Planning of meals for the week (Executive Function)
 - 3) Writing down which ingredients to buy for the meals (Language)
 - 4) Looking for things in the supermarket (Spatial Orientation)
 - 5) Keeping track of the items you have in the basket (Working Memory)
 - 6) Remembering where you parked your car (Visual Memory)

Cognition

- Necessary to succeed in daily life
 - Work
 - School
 - Social life

Important for a better Quality of life

Cognition in Bipolar Disorder

COGNITION IN BIPOLAR DISORDER

- WHAT IS IT?
- HOW DOES IT INFLUENCE DAILY LIFE?
- WHAT CAN BE DONE ABOUT IT?

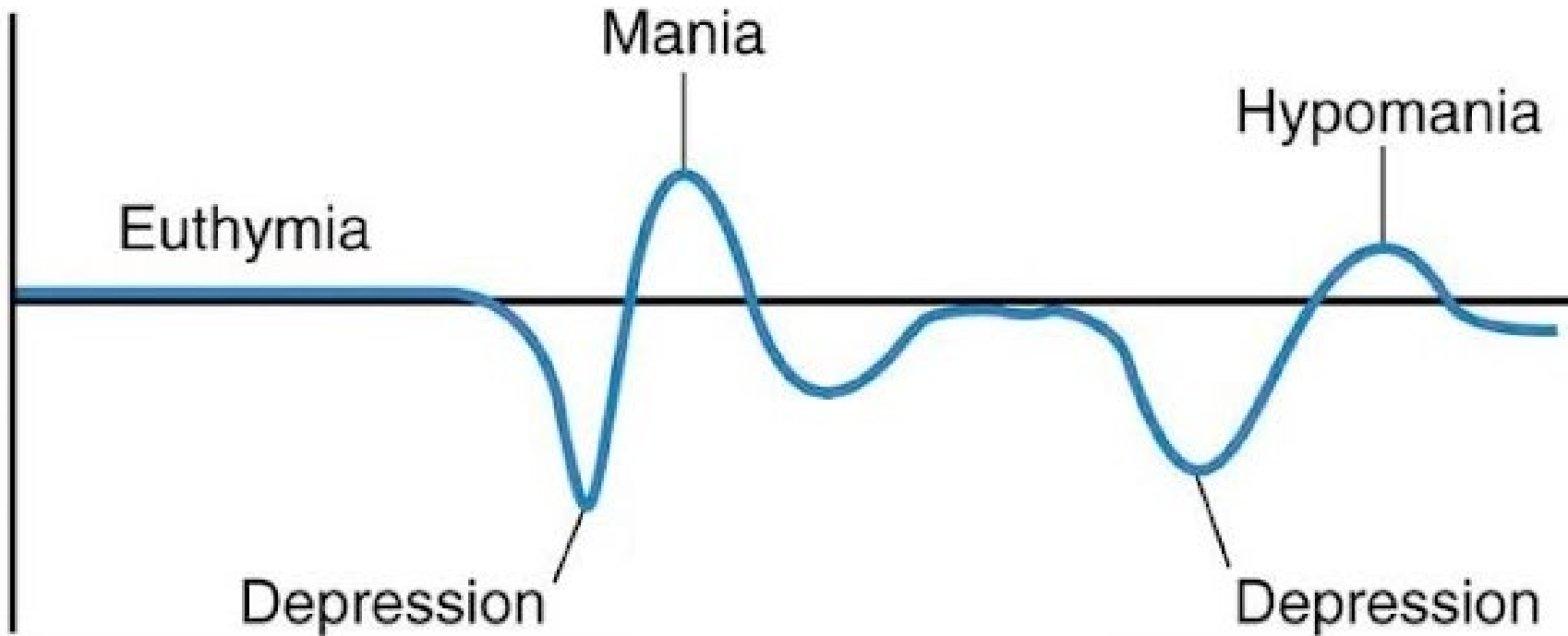


Med støtte fra
TrygFonden



Cognition in Bipolar Disorder

- Thoughts
- Judgment
- Impulse



- Attention
- Concentration
- Memory
- Problem solving

Cognition in Bipolar Disorder

- Variable



Cognition in Bipolar Disorder

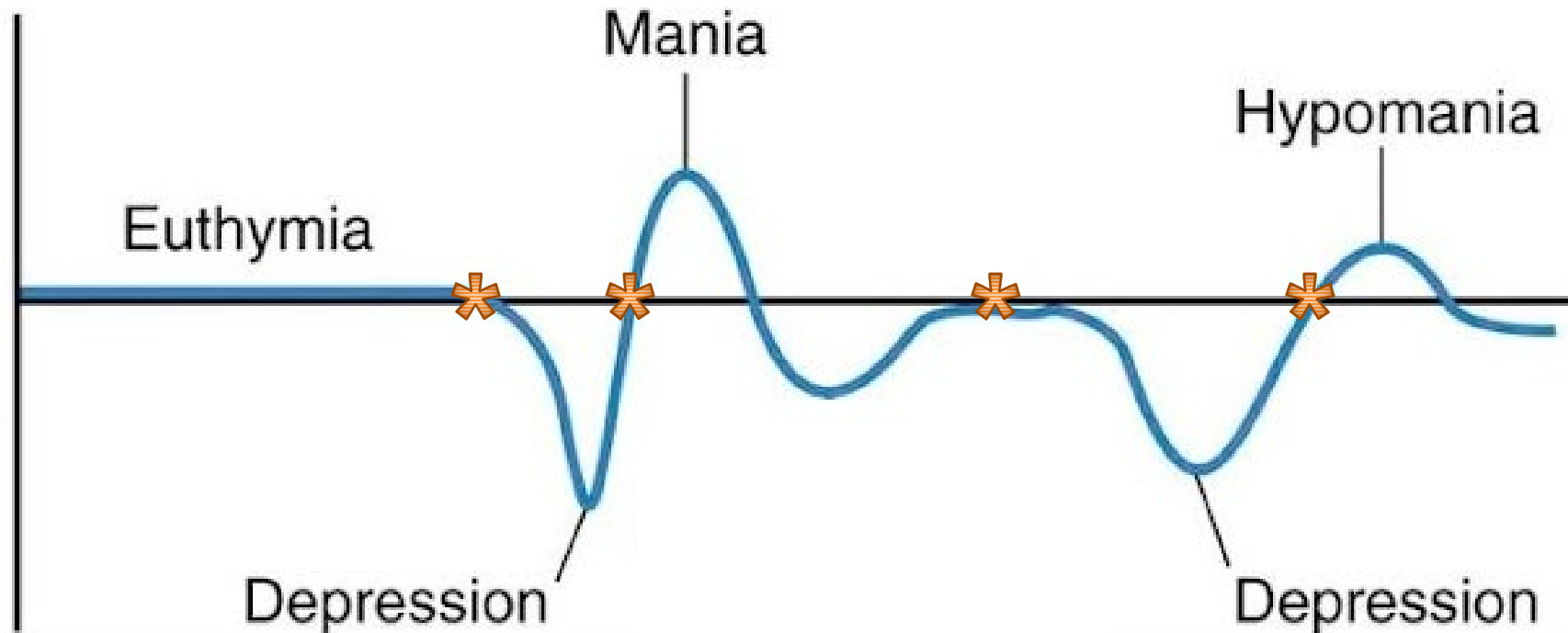
- Type of episodes (Mania or mixed)
- Severity (with psychosis, or requiring hospital admission)
 - Greater duration of episodes
 - Longer episodes

worse for

Cognition

Cognition in Bipolar Disorder

Cognitive deficits can precede mood symptoms



Cognition and Daily Function

Difficulty:

- Following conversations
- Reading
- Shopping
- Remembering appointments
- Cooking

Leading to:

- Reduced self-worthlessness
- Problems in social relationships
- Feelings of guilt and shame

Cognition and Daily Function

- Hide
- Compensate
- “invisible handicap”
- No assessment or treatment

Medications and Cognition:

- When treat mood, many improve cognition
- However, some can have cognitive side effects
- Better to evaluate before and after changing treatment

Medications and Cognition:

MEDICATIONS AND COGNITION

Antipsychotic drugs:

- Typical antipsychotics associated with cognitive problems in high doses
- Newer, atypical antipsychotics little or no cognitive side-effects

Antidepressant drugs:

- Older tricyclic antidepressants some cognitive side-effects
- Newer antidepressant drugs generally no cognitive side-effects

Anxiety reducing medications and sleep medications:

- Anxiety reducing medications side effects on attention and memory
- Sleep medications less side effects, mainly with longer term use

Lithium:

- Cognitive side effects only in high doses - not for doses in the recommended range

Antiepileptic medications:

- Possibly mild cognitive side effects, this differs between the drugs

Electroconvulsive therapy:

- Cognitive side effects on memory and executive skills, but typically transient (<3 months)

Cognition and Life Style:

- Several factors tend to negatively impact cognition
- Identify and address

THINGS THAT CAN MAKE COGNITIVE PROBLEMS WORSE:

1. Lack of sleep
2. Lack of physical exercise
3. High fat in diet
4. Being overweight
5. Certain medical illnesses
6. Recreational drugs
7. Abuse of alcohol
8. Lived stress

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Treatment

- How to take action?
 - If persistent cognitive problems after mood episode -> have a formal assessment with your mental health provider
 - Take medications as prescribed
 - Regular and sufficient sleep
 - Physical exercise
 - Restrict alcohol intake
 - Assessment before and after medication changes

Taking Action

- Compensatory strategies:
 - Find different ways to accomplish your goals and give your brain a little help
 - Simple tricks to make everyday tasks easier
 - For example:
 - Mnemonics (memory aids)
 - Link names to activities
 - Break down tasks into smaller parts

Taking Action

- Adaptive approaches:
 - Make changes to your environment
 - For example:
 - Use a recording device
 - Use a written list
 - Set timers to remind to do certain activities and medications
 - Use ear plugs to minimize distractions
 - Keep a routine
 - Use a consolidated calendar

Tips and Tricks

- **Cognitive reserve** = ability to cope with brain damage and age-related changes
- Boosting cognitive reserve:
 - Educational level
 - Work attainment
- Higher reserve = higher resilience

Taking Action

- Talk with relatives and close friends
 - Invisible handicap”
 - Not indifference or carelessness
 - Part of having bipolar disorder
 - Be open about your difficulties
 - Talk about how they may help

Advice for Relatives

- Try to understand how you can help
- Show patience
- Help introduce a structure in daily life
- May need to repeat or write things down
- Encourage use of external aids
- Set realistic expectations

Treatment

- No approved medical treatment
- Promising treatments under investigation
- Strengthened by “exercising” brain
- Behavioral strategies (remediation, compensatory, adaptive)

Promising Research

- Lurasidone
 - 6 weeks
 - Euthymic bipolar disorder type I
- Vortioxetine
 - Unipolar depression
 - Different domains of cognition
- Mifepristone
 - Two studies of 1-3 weeks
 - Individuals with bipolar depression
 - Benefit on spatial working memory

Promising Research

- Modafinil
 - Unipolar depression
 - Episodic memory
- Enhance cognition in bipolar disorder and reduce daytime sleepiness
- Impact sleep quality

Promising Research

- Psychological training – Cognitive Remediation
 - Cognitive training
 - Compensation techniques
 - Coping strategies
 - Action-based (practice): apply learned skills to daily life challenges

Promising Research

- Combination:
 - Medication
 - Psychological training

Promising Research

- Ketamine
 - Rapid antidepressant effect
 - Small study suggests it can improve processing speed
 - Studies combining unipolar and bipolar depression are promising
 - More studies are needed

Are You Still Depressed?



National Institute
of Mental Health



JOIN A STUDY

Protocol #001602
Carlos A. Zarate, M.D.,
Principal Investigator

NIH Research Study Opportunity! If you have been treated for depression and still feel depressed, you may be eligible for this 12- to 14-weeks inpatient research study testing the effectiveness of an investigational new drug, HNK, which comes from ketamine.

If you are currently depressed even after trying antidepressants, are ages 18 to 70 years old, and otherwise healthy you may be eligible to participate. The inpatient study includes psychological and cognitive tests, IV medication, and brain scans. Some participants may have the option to complete parts of the study as an outpatient.

No cost to participate, health insurance is not needed. The study takes place at the NIH Clinical Center in Bethesda, MD. We help make travel arrangements and pay for travel costs (arrangements vary by distance and circumstance).

1-877-646-3644

(1-877-MIND-NIH) TTY: 711

moodresearch@mail.nih.gov



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Do you know someone who has
***Attempted* SUICIDE?**

NIH Research Study enrolling adults who are NOT currently suicidal



NIH RESEARCH STUDY ENROLLING AGES 18 TO 70



1-877-MIND-NIH

(1-877-646-3644) TTY: 711
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Compensation & travel arrangements provided for participation.

Study #15-M-0188, Carlos A. Zarate, M.D., Principal Investigator

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