



مدينة الملك فهد الطبية  
King Fahad Medical City



## Cognitive Impairment

## What is Cognition?

Difficulty with any aspect of communication that is affected by disruption of cognition.

Some examples of cognitive processes include:

Attention

memory

organization

problem  
solving/reasoning

executive  
functions.

- Problems in these areas can affect verbal and nonverbal communication. For instance, speaking, listening, reading, writing, and pragmatic (social interaction) skills may be affected negatively.
- Problems with cognitive-communication can affect activities of daily living, and academic and work performance

## Who can be affected?

**Children or adults  
who have  
experienced:**

- Congenital diseases and syndromes.
- Traumatic brain injury.
- Genetic disorders.
- Low oxygen levels at birth.
- Brain tumors.

## Who Can Help?

Visit your local Speech-Language Pathologist to help you in identifying, assessing, intervening, and counselling. Allowing with providing collaborative team work with other disciplinarians (e.g. teachers) for the benefit of the individual.

## Effect on Behavior and Language:

### Aspect of Cognition: Attention

#### Effect on Behavior

- Short attention span; distractible.
- Weak concentration

#### Effect on Language

- Decreased auditory comprehension.
- Confused/inappropriate language.
- Poor topic maintenance

### Aspect of Cognition: Perception interpreting sensory information

#### Effect on Behavior

- Field neglect.
- Poor visual/auditory judgment.

- Spatial disorganization.
- Impaired focus.

### Effect on Language

- Reading difficulty.
- Writing difficulty.
- Poor comprehension of facial/intonation cues.

### Aspect of Cognition: Memory and Learning;

- **Encoding:** recognizing, interpreting and formulating information.
- **Storage:** retaining information over time.
- **Retrieval:** transfer of information from long-term memory to consciousness

### Effect on Behavior

- Memory problems.
- Inability or inefficiency in learning new material

## Effect on Language

- Problems in:
  - Following multi-step directions.
  - Reading/spelling comprehension
  - Math
- Word finding problems.
- Poor integration of new/old information.
- Fragmented language.
- Impaired logic.

## Aspect of Cognition: Organizing Process;

### Effect on Behavior

- Disorganization of tasks/time.
- Difficulty setting/maintaining goals.
- Poor problem solving.
- Poor self-direction, self-confidence, and social judgment

## Effect on Language

- Disorganized verbal communication/writing.
- Difficulty expressing ideas.
- Poor conversation skills.

## Aspect of Cognition: Reasoning;

Ability of the mind to think and understand things in a logic way and use of past experience.

## Effect on Behavior

- Easily swayed; impulsive.
- Vulnerable to propaganda.
- Problems with understanding consequences of behaviors.

## Effect on Language

- Troubles in understanding/expressing (Abstract concepts)

- Humor, academic subjects, and complex conversations
- Impaired pragmatic skills

### **Aspect of Cognition: Problem Solving and Judgment;**

- Identifying goals:
  - Identifying relevant information.
  - Selecting solutions.
  - Judgment: prediction of consequences and acting appropriately

### **Effect on Behavior**

- Impulsive; uses trial and error approach.
- Hardness in predicting consequences.
- Shallow reasoning.
- Poor (Safety, Use of compensatory strategies)



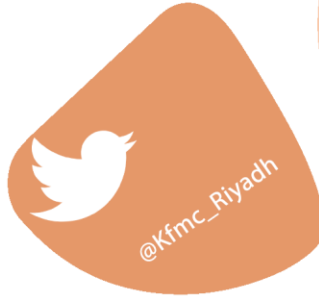
## Effect on Language

- Difficulties in:
  - higher academic tasks
  - understanding behaviors
- Socially inappropriate behavior.

# لأن الوعي وقاية ..

إدارة التثقيف الصحي

Communication and Swallowing  
Disorders Dept.



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