

Auditory Processing Disorders and Their Relationship to Learning Disabilities

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- I. DEFINED
- II. ASSESSMENT
- III. INTERVENTION




Defined:

(Central) Auditory Processing (CAP)
refers to the efficiency and
effectiveness by which the central
nervous system utilizes auditory
information




Elicits electrophysiologic
auditory potentials



(C)AP includes the auditory mechanisms that underlie...

- sound localization
- auditory discrimination
- auditory pattern recognition



- auditory performance in competing acoustic signals



(Disorder Central) Auditory Processing

- difficulties in the perceptual processing of auditory information as evidenced by poor performance in one or more of the following skill areas:




Temporal aspects of audition

- temporal integration
- temporal discrimination
- temporal ordering




Language related functions:


- phonological awareness
- attention to and memory for auditory information
- auditory synthesis
- comprehension of auditorily presented information




(C)APD is a deficit in neural processing not due to higher order language, cognitive, or related factors




(C)APD is not a result of
ADHD, language impairment
or learning disability




Language processing and
auditory processing are not
synonymous




(C)APD is an auditory deficit
therefore the audiologist is the
professional that diagnoses
(C)APD




SLP's role in (C)APD is to
collaborate in the assessment
of (C)APD and to...




Provide intervention when a speech, language or cognitive-communication disorder exists.




SLPs are qualified to delineate cognitive-communicative and/or language factors associated with (C)APD



Speech-language, psychological
and related measures cannot be
used to diagnose (C)APD




Intervention should include both
bottom-up and top-down
approaches



Bottom-Up

- acoustic signal enhancement
- auditory training




Top-Down

- cognitive
- metacognitive
- language strategies




Three Component Approaches:

- direct skills remediation
- compensatory strategies
- environmental modifications




Therapeutic approaches are a
bottom-up approach to reduce
or remediate the (C)APD



Therapeutic approaches address specific deficits

- phonological awareness
- lexical decoding speed
- auditory-linguistic integration
- temporal ordering and sequencing
- pattern recognition



Compensatory strategies are a
top-down approach designed to
minimize the residual (C)APD



Compensatory Strategies Include:

Metalinguistic strategies


- discourse cohesion
- content derived vocabulary
- preteaching of materials



Compensatory Strategies Include:

Metacognitive Strategies:

- self instruction
- cognitive problem solving
- assertiveness training



Environmental accommodations may include:

- preferential seating
- use of visual aids
- use of assistive listening systems
- speaker's use of a slower rate of speech



Classroom Modifications

Focused listening:

- note takers
- preview questions
- organizers



Classroom Modifications

Redundancy:

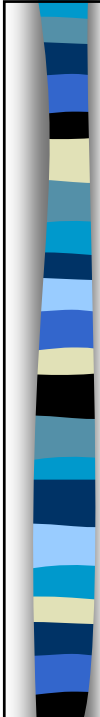
- multisensory instruction
- computer-mediation



Classroom Modifications

Written Output:

- e-mail
- mind maps



Goal:

To provide the individual with
the ability to communicate more
effectively in everyday contexts