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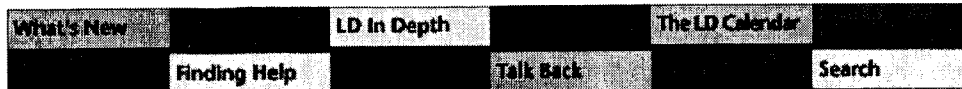
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## ABSTRACT

This paper describes adult symptoms of Central Auditory Processing Disorder and provides strategies for dealing with this disability. Symptoms include talking or turning on the television louder than normal, interpreting words too literally, needing remarks repeated, having difficulty sounding out words, ignoring people, being unusually sensitive to sound, asking many extra informational questions, confusing similar-sounding words, having difficulty following directions in a series, developing speech late or unclearly, communicating poorly, memorizing poorly, hearing better when watching the speaker, and having problems with rapid speech. Strategies for compensating for the disability include: (1) asking for a desk away from computers or for a sound-absorbent partition, or using a mild-gain amplifier; (2) using earplugs and having someone else proofread work; (3) being tapped on the shoulder before being addressed conversationally and adjusting telephone bells and alarms for volume; (4) asking for information in writing; (5) taking notes and setting up a logbook for longer-term assignments; and (6) learning cues on how to read people's feelings and how to change speech accordingly. (CR)

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# LIVING AND WORKING WITH A CENTRAL AUDITORY PROCESSING DISORDER (CAPD)

Judith W. Paton, M. A., Audiologist

The easiest, quickest way to communicate is simply to say something and then deal with the other person's reply, right?. Right, unless your listener has a CAPD (Central Auditory Processing Disorder), then your remark might come through with certain words drowned out by other noises, or with some words sounding like different words or as meaningless strings of verbiage. You might begin to suspect this when the other person's expression doesn't register understanding, or if he, "answers the wrong question," or he asks you for additional information which most people would have been able to infer from what you just said.

Most of us aren't that sophisticated about CAPDs, however, and are much more likely to wonder if the listener is just not very intelligent or doesn't really care about us and what we are saying. People with CAPDs (which are usually part of a learning disability) have been embarrassed by situations and reactions like these all their lives.

A CAPD is a physical hearing impairment, but one which does not show up as a hearing loss on routine screenings or an audiogram. Instead, it affects the hearing system beyond the ear, whose job it is to separate a meaningful message from non-essential background sound and deliver that information with good clarity to the intellectual centers of the brain (the central nervous system). When we receive distorted or incomplete auditory messages we lose one of our most vital links with the world and other people.

These "short circuits in the wiring" sometimes run in families or result from a difficult birth, just like any learning disability (LD). In some cases the disorder is acquired from a head injury or severe illness. Often the exact cause is not known.

Children and adults whose auditory problems have not been recognized and dealt with are forced to invent their own solutions. The resulting behaviors can mask the real problem and complicate not only school and work, but even close relationships, where communication is so important. Advice like "Pay attention," "Listen," or "Don't forget --," hasn't helped either.

It takes specialized testing to identify a CAPD. Some of the tests used by educational therapists, neuropsychologists, and educational psychologists give at least an indication that a CAPD might be present. These include tests of auditory memory (for sentences, nonsense syllables, or numbers backward), sequencing, tonal pattern recognition or sound blending, and store of general information (which is most often acquired through listening). The most accurate way to sort out CAPDs from other problems that mimic them, however, is through clinical audiologic tests of central nervous system function. These are better at locating the site of the problem and reducing the effects of language sophistication on the test results.

Do your best to choose a professional who is familiar with CAPDs, is comfortable working with adults, and who can write a useful and understandable report. You might ask: "How many adults with auditory processing disorders do you work with in a year?" or, "What kind of a report would you write to help me or my employer understand my problem?" Nowadays there are many ways professionals can help you

or my employer understand my problem?" Nowadays there are many ways professionals can help you streamline your coping abilities. Also, there may be conditions accompanying the CAPD which are medically treatable like allergies, Attention Deficit Disorder, Tourette syndrome, or nutritional deficiencies.

This checklist of common features of CAPD might lead you to consider such a possibility for yourself, a co-worker, or a friend or relative, if several items apply:

- Talks or likes T. V. louder than normal.
- Interprets words too literally.
- Often needs remarks repeated.
- Difficulty sounding out words.
- "Ignores" people, especially if engrossed.
- Unusually sensitive to sounds.
- Asks many extra informational questions.
- Confuses similar-sounding words.
- Difficulty following directions in a series.
- Speech developed late or unclearly.
- Poor "communicator" (terse, telegraphic).
- Memorizes poorly.
- Hears better when watching the speaker.
- Problems with rapid speech.

CAPD is a physical disorder under the protection of the ADA (Americans with Disabilities Act). But put yourself in the other person's place: how can your supervisor or co-worker possibly know whether you made a mistake because of impaired hearing, lack of interest, or stupidity? You need to know how to identify the problem so that you can explain it to others and ask for what you need. If you grew up at a time or place where your CAPD wasn't recognized you might need a knowledgeable professional to give you some insight into this. But if you listen to your feelings rather than trying to talk yourself out of them, you can generally get a good sense of the help you would like. Thus, if noisy people and places "bug" you, or if your most satisfying school memories were of projects you built or field trips you went on, you don't need anyone to tell you you'd work best in a quiet place, or that you're a hands-on or experiential learner.

So what do you tell them at work to keep this from becoming another one of those jobs where you quit before they can fire you? Here are some ideas. Do you:

1. Have trouble hearing clearly when it's noisy? This can be a failure of one or more of the automatic noise-suppression systems of the brain. It is reasonable to ask for a desk away from the computers or for a sound-absorbant partition. It is both polite and efficient to say, "I'm interested in what you're saying. Let's move away from this noise." A mild-gain amplifier can help you hear accurately on the phone over the noise of a busy office.
2. Sometimes make "silly" mistakes or "careless" errors? Intrusions of random sounds which normal-hearing people can ignore may break your concentration so that you lose your place and skip a task (like carrying a number or writing a small word in the sentence). Take the work to a quieter place if necessary. Earplugs (sometimes in only one ear which suppresses noise less well) are a possible emergency solution. Make a deal with someone else to proofread your work.
3. Miss important sounds or signals that others hear easily? Poor noise suppression and sound localization skills can cause important voices or signals to "disappear" in the general background. It will save others time if they know to tap you on the shoulder before they launch into their conversation. Telephone bells and alarms can be adjusted for volume or pitch, or a visual or tactile signal can be added.
4. Get important messages wrong? Sound distortion, sequencing, auditory-visual transfer,

and/or short term memory problems may be contributors. You can ask for the information in writing, double-check later with someone else who was present, or let the speaker know that she's going too fast. Even normal listeners often say, "Let me read that back --," or "That's '3489'?"

5. Forget instructions? Inefficient short term auditory and rote memory (or habituation) may figure in this. Get in the habit of taking notes; set up a logbook for longer-term assignments; ask that the information be put in a memo. You might even carry a small tape recorder or dictaphone in some situations. If you often forget to go back to it later, put the memo or recorder where you must see it, as by your purse or underneath something you use every day.

6. Only get parts of more complex directions or lengthy explanations? Here you may begin to suspect a problem with the subtleties of language - difficulty forming rapid "word pictures" to help with concept formation and memory, or failure to consider alternative word definitions so that meaning is mis-perceived. You can "freeze" it for later analysis by writing or taping. You can say "I learn better if I do it myself while you watch." Have someone else help you fill in details later.

7. Have difficulty knowing "what to say when" and are puzzled by others' reactions to you? One possibility is an inefficiency in the part of the brain which registers tonality (expression in the voice) and gives us "quick fix" on the situation (sometimes referred to with rough accuracy as a "right hemisphere disorder"). A professional can help you learn other cues by which to "read" how people are feeling about what you said and how to change what you say accordingly, much as anyone would have to learn about a foreign culture. In the meantime you might explain the problem to people you trust so their feelings aren't hurt.

If you inherited parts of your CAPD/LD from your parents, as is often the case, you need to remember that they grew up when far less was known about these conditions than the little which may have been known when you were young. They may have raised you with some of the harmful "scripts" that were part of the parenting they received in a generation where professionals and parents knew nothing about CAPDs. Chances are your teachers or other professionals you grew up with were not well-informed, either. Thus you might have been told "You'd do fine if you just tried," or "You'll never amount to anything," or worse. If so, try to remember that those things were not true or helpful, but just what comes of lack of good information. Work to rid yourself of those inaccurate parts of your self-image, and to forgive your parents and others for their lack of knowledge. Above all, resolve not to pass on their "bad advice" to your own children or to let it spoil relationships with other people you care about.

Remember that for you to have arrived at the point where you are educated and employable, you must have many talents and strengths. You may have superb visual memory, or be a gifted problem-solver or mechanic, or be loved for your way with people, or be wonderfully creative. Some of your skills may have been under-valued in an academic setting, but now they can be worth money! These strengths will be there to help you through the rough spots so work to identify them, either on your own or with the help of a good professional.

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