SSW NEWSLETTER

Vol. 1 No. 4 CHILDREN and L D AUGUST 1979

BUT WHAT DOES HE DO RIGHT?

We frequently become so involved in errors and response biases that we seldom have anything good to say about a child. A learning disabled child has obvious left hemisphere dysfunctions. The testing by the Speech-Language Pathologist and our central auditory testing are sensitive to the child's weaknesses. At least the psychologist can give a performance IQ so the child can succeed for part of the test period.

What tests do we have which highlight the child's strengths? If Witelson (1977) is right, the reading-disabled child has overdeveloped right hemisphere function. That is, he prefers to take in sensory information holistically. Shouldn't we see good or even superior performance on the CES if that is so?

I firmly believe that the CES should be included in the central battery on every child. But, a word of caution about the response mode. If the child points to the picture, we are probably testing only right hemisphere. If, however, we ask the child to name the sound, we are clouding the issue, Would the scores be different in the two response modes for LD children? Let's hear from CES users.

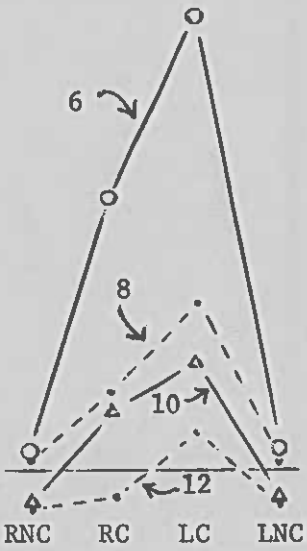
Witelson, S. Developmental dyslexia: two right hemispheres and none left. Science 21: 309-311, 1977.

SSW NATIONAL SAMPLE --- The first peak

So far the data for 86 children have been sent in. They are most encouraging. This report will cover the results for age groups 6, 8, 10 and 12. These data must be considered preliminary, but do give an indication of how the data are going. Please do not be influenced by these data in submitting your cases. It is still too early to know what the "true" norms will look like.

This figure shows the mean C-SSW scores for the 4 Conditions. The results resemble our previous "standards." The present means do not differ by more than 4 points from the C-SSW mean's of Myrick, '65 and Beyer, '77.

Thus far it seems that the SSW scores will be fairly consistent for each of the age groups within the general population. We have less knowledge about response bias (RB). The National Sample can add important data and help us to better understand maturation of the CANS. The work of White, '77; Kushner, et al, '77 and Johnson et al, '78 provide us with an indication of what to expect.



First peak, SSW National Sample C-SSW scores: 6, 8, 10 & 12-yr gr.

It is still too early to say what RB should be expected at the various age levels. We do expect to find RB in many normal children, based on the literature but the extent of the bias should not be so extreme as we find in the LD population. In this sample the major RB has been the reversal with the Type B pattern being the least frequent.

In the cases tested from now on please ascertain the child's handedness. There are some suggestions that there may be some dialect or some racial differences so please indicate race or dialect variations.

WE NEED LOTS MORE NORMAL KIDS --- KEEP SENDING

THE USE AND MISUSE OF THE SSW TEST - IV: THREE NEW SUBTESTS - C. DEMPSEY

Clinicians who erase the "Are You Ready?" from the SSW tape in a desperate attempt to save their sanity may be eliminating a very valuable addition to the central auditory test battery. The structure of the test, in its entirety, has proven to be useful in separating children with auditory learning problems from "normals." Observations of all of the child's responses during the SSW can be predictive of attending behavior in the classroom. In order to record the responses more effectively, I have divided the SSW into three subtests, each of which has one or more response biases.

INSTRUCTION SUBTEST (SSW_I): Children are often referred for testing because they cannot follow directions in the classroom. The SSW begins with 8-stage instructions. Initially, I tried to clarify them for children having trouble, but I found nothing worked with LD children. I finally realized that the instruction section is a good test of sequencing and can be used to confirm the teacher's suspicions. As many of the children we see are good visual processors, they can follow instructions only if they can visualize what they are to do. Note the abstract nature of the instructions for the SSW. In order to follow these directions, the child must be an auditory processor and linguistically intact. I suggest letting the tape run without comment, clarifying only when the child asks questions or is in obvious difficulty. Note whether the child could follow the instructions without help or whether he needed clarification (minor, moderate, constant). If the child spontaneously asks for clarification, he is aware of his problem and has found a method to cope with it. It may be a sign that, with help, he can overcome some of his auditory problems.

PRACTICE SUBTEST (SSW_P): The first four practice items do not test the same listening abilities as do the test items. The practice items cue the child to listen to a group of words, but do not provide practice in dichotic listening. As these are two different tasks, the child must be able to transfer learning. This frequently separates the LD child from the normal. After all, a specific learning disability is one in which a child is able to learn one task very well, but cannot generalize to other similar tasks. The child who succeeds on the practice items and cannot cope with the first few test items may have problems learning in an auditory mode. This is a very useful observation and should be of help to the classroom teacher. Do you then use the first four test items for practice? I think so. As the test scores are sensitive to development of auditory reception areas, they should not be colored by poor auditory generalization behavior, which seems to be an interhemispheric function. Again, it is of interest to note how many actual test items are needed before the child has solved the auditory problem.

ARE YOU READY SUBTEST (SSW_{AYR}): This is perhaps the most interesting and useful of the response biases. As every item is preceded by the carrier phrase, the audiologist has forty chances (if he can stand it) to observe the child's reaction to a rhetorical question. The "normal" child simply ignores the phrase as it is regular and expected and is eventually adapted out of consciousness. Therefore, the child who must deal with the question every time it is asked is behaving inappropriately to an irrelevant stimulus. I think that an LD child tends to show a single mode of coping and frequently does not alter this response during the test. Here are some of the categories of responses. Have you spotted others?

THE MUMBLER: He knows he shouldn't repeat, but can't seem to stop, so he mumbles it.
THE REHEARSER: He not only repeats AYR but says it whenever there's a lull between items.
THE ECHO: Repeats the phrase, mimicking the exact tempo and inflection pattern.
THE ROBOT: Answers all questions, especially those requiring yes/no responses, regardless of how silly they are.

THE USE AND MISUSE OF THE SSW TEST - IV. (CONTINUED)

EMBARRASSED: Gets red in the face when he has inadvertently repeated AYR. Feet begin to shuffle and he squirms in the chair. Has difficulty with the next test item. Child is very hard on himself for making a "mistake."

WHOOPS: Delayed response to error. Claps hand over mouth after responding. This child's papers are usually full of erasures.

OH-THE-HECK-WITH-IT: Gives up sorting it out. Just shrugs shoulders and repeats. Cannot sustain effort.

THE SOPHISTICATE: Does not repeat but smiles secretly to himself each time he hears AYR. May even start to giggle toward end of test. Seems to get pleasure from repeated stimuli. Warn parents about saying, "If I told you once..."

THE ANTICIPATOR: Good sense of rhythm. Says phrase with Jack or mimes it. Refer for drum lessons.

SILLY: Responds "no" to AYR. Seems to need attention constantly.

OH-BOY-THAT'S-DUMB (OR, I'M-NOT-THAT-STUPID): Frowns, knits brows, may even become surly. May believe all tests are tricks by authority figures to show him up.

THE SCREAMER: Gets so frustrated that he yells answer or phrase. No self-control. Eventually stands up and hollers into microphone.

However whimsical some of the categories may seem, these kinds of observations may help the audiologist gain some insight into the child's classroom behavior patterns. Many are associated with attentional disorders and might need further investigation. Certainly, recommendations for control of the auditory environment are more meaningful for parents and teachers if they are individualized for the child. It is important to remember that affective behavior is also a function of cortex and may be disturbed in the children we see.

In summary, if a child can follow 8-stage instructions, generalize from the practice items to the test items, and ignore the carrier phrase, I think he is probably not in trouble, at least as far as primary auditory processing is concerned. Go to tests of auditory integration, if you have any.

****

ANYONE FOR AURAL REHABILITATION?
(ABSTRACT)

THE INFLUENCE OF DIFFERENTIAL AUDITORY FEEDBACK UPON THE READING OF DYSLEXIC CHILDRE
J.S. GILLIS AND A.E. SIDLAUSKAS
NEUROPSYCHOLOGIA 16: 483-489, 1978

Ten poor readers, mean age 8.1 years, were asked to read a story aloud once every two weeks for a period of four months. Oral reading was recorded under four conditions

1. auditory feedback to right ear only, high pass filtered,
2. auditory feedback to right ear only, no frequency modification,
3. auditory feedback to both ears, high pass filtered,
and 4. auditory feedback to both ears, no frequency modification.

Results showed significant increase in reading fluency (number of words read) under condition 2. High pass filtering did not show significance due to poor response from one child.

****

1980 ACLD INTERNATIONAL CONFERENCE: MILWAUKEE - FEB. 27 - MAR. 1

ACLD Newsbriefs, 4156 Liberty Rd., Pittsburgh, Pa. 15234 $4.50/yr.

CHOOL-AGE MALINGERERS - RITA WIECZOREK

UBJECTS: Ten children (4 males and 6 females) between the ges of 7 and 13 years were found to malinger* during an nitial hearing test. After ascertaining that all children ad normal hearing, tests of central auditory function were iven.

ENTRAL TESTS: SSW, Competing Sentences (CS), Binaural usion (BF), Rapidly Alternating Sentence (RAS), and iltered Speech (FS). Not all children received BF and FS.

ESULTS: SSW: Nine (90%) showed abnormal scores (Type A in LC). The tenth child, who had only a few suspicious errors, showed reversals.

SSW Biases:	
Smush	100%
Reversals	30%
LE Effected	90%

CS: Seven (70%) had abnormally low scores either in one ear correct or double correct (LE).

BF: Seven (100%) had abnormally low scores.

RAS: Six (60%) performed poorly.

FS: Two (40%) showed low scores in the left ear.

ISCUSSION: It is obvious that it is not enough to badger the alingerer into "owning up" to having normal thresholds. The hild is trying to tell us something about her hearing. LD hildren frequently develop malingering behaviors toward chool, probably out of sheer frustration and hurt ego. Why ick hearing tests? Any malingerer in his right mind would ave backaches or headaches as those can't be diagnosed asily. The hearing test malingerer seems to be smart enough o know where the problem lies. It's interesting that this ample is 60% female, which is the reverse of incidence igures by sex for learning disabilities. Why do females hoose this form to call attention to their problems?

ONCLUSIONS: 1. Children who malinger are liable to have entral auditory processing disorders. 2. The SSW is the ost sensitive test to determine auditory function in this roup. 3. Of the Willeford tests, CS and BF are more ensitive than RAS and FS.

Editors Note: The type of malingering behavior was not ecorded for this sample. It has been my experience that he child frequently shows exaggerated thresholds in the on-dominant ear. What have you found?

****

EMEMBER THAT PARENTS LEARN MORE FROM OTHER PARENTS THAN THEY O FROM PROFESSIONALS. Perceptions is a newsletter by parents or parents. Perceptions, Inc. P.O. Box 142, Millburn, N.J. 7041. $12.00/yr. (8 issues).

*** MORE SMUSH ***

There seem to be two different types of SMUSH errors:

TYPE I:
JAY + BLACK = JACK
SHORE + OUT = SHOUT
SAW + FIRST = SOFT
SPREAD + MUSH = SQUASH
END + WORK = WORD
CAGE + CROWS = CRAY
WALLS + DOG = DOLLS
WHITE + FOOT = FIGHT
GROUND + BAT = BROWN

These occur only in the competing conditions.

TYPE II:
BAND + SAW = SAND
BED + SPREAD = BREAD
FLOOD + FLASH = FLUSH
MEAT + SAUCE = SOFT
SUN + SHOE = SHUN
BACK + PLAY = BLACK

These are some combination of non-competing and competing. They seem to be less related to selective attention skills than to sequencing skills. Are these Spoonerisms?

** PERSEVERATIONS **

Some items seem to encourage repetition. These are common:

GREEN HOUSE GREEN BEAN
RACE HORSE RACE CAR
SHEEP SKIN SHEEP DOG
HAND BALL HAND SHAKE
WOOD WORK WOOD CRAFT
ICE CREAM SWEET CREAM
BLUE JAY BLUE BIRD
SNOW BALL FOOT BALL
SCHOOL BOY SCHOOL BELL
WHITE DOG DOG HOUSE
HOUSE WORK WOOD WORK

At least the child knows there are four test items!

******

CASE: EMOTIONAL DISTURBANCE: CHICKEN OR EGG?

Submitted by Liz Protti and Maxine Young

CC: 8 y.o. male referred by neurologist for CAT. Behavior problem in school and placed in class for emotionally disturbed. Has shown aggressive behavior toward teachers, parents and sibs. Family in counseling.
HX: Adopted, normal birth, APGAR 10. Talked at 6 mo. but using only single words at age 3. Talks only when necessary. "Hyper" since birth, colicky, nightmares and enuresis. Given sedative for sleep since birth. Ritalin started at age 7. Does not control behavior now. Motor dev. excel. Frequent nasopharyngitis. EEG normal.
SCHOOL ACHIEVEMENT: Verbal IQ 89, performance 104. Visual-motor integration problems. Short attention span. Poor reader. "Immature."
NEUROLOGICAL: Difficulty balancing on R foot, mixed dominance, rotates Bender figures 90 degrees. Mild choreiform-like movement of outstretched fingers. Impression of mild neurolog. pbm. "Outbursts related to frustration resulting from communic. pbm."
AUDIOGRAM: Mild, bilat. cond. loss (15dB). Imped: Type A rt, C lt. Reflexes reduced rt, absent lt.
CAT: (Tested on meds: 20 mg Ritalin, 70 mg Melaril.)

SSW:

8 CN's =
0 3 7 1 0 14 5 3

Type A - LC

13 Reversals

9 Perseverations

0 Smush

LE Effected

Willeford: CS - 70% rt, 0% lt; FS - 70% rt, 28% lt; BF - 50%; RAS - 90%.

INTERPRETATION: Poor lt. hemisphere function in posterior and anterior temporal lobe areas. Severe auditory sequencing problems. Has nasopharyngitis been associated with subclinical SOM? Pattern typical of children with LD.
DISCUSSION: This child is already diagnosed as ED by school and doesn't qualify as LD under PL 94-142. Note verbal and performance IQs. Are his emotional problems a result of his learning problems as the neurologist believes? Do they coexist? It is obvious that this child is not neurologically "immature." The scattered test results show him working at age level for some tasks and not resembling younger children on those he had trouble with. What type of classroom placement would you recommend?

**** FYI ****

We recently ran into a sad case of a college student who failed practice teaching because she could not produce polysyllabic words. She sounded like Mrs. Malaprop. No one ever noticed that she couldn't spell or read aloud. She had 25 reversals on the SSW. We have now taken to screening our own Speech majors to ward off failures in phonetics and statistics.

*

The older LD student has difficulty taking notes and organizing what he hears or reads. Recommend that he be allowed to use a tape recorder in class. The spoken voice will indicate what is important by stress patterns. He should also be encouraged to read his texts into a recorder as well. Talking Books may have his text already on tape.

*

A tape recorder with a speed control (from .6 to 2.5 X normal rate) is available from Variable Speech Control Co., 185 Berry St., San Francisco, CA. 94107. Two models available. Compact size.

Children with attentional problems may benefit from speeded listening. (More vigilance required?) Some children with sequential problems may need to slow speech down.

****

SSW Newsletter
Jack Katz, Editor
State University of New York at Buffalo
Communicative Disorders and Sciences
4226 Ridge Lea Road
Buffalo, New York 14226
716-831-1605

Charlotte Dempsey was the Guest Editor for this issue.