## SSW Reports

### A Special Workshop

Nancy Stecker, Kim Tillery and Jack Katz have combined their more than 100 combined years of experience with the SSW Test and The Buffalo Model to present a Special Workshop. The program will combine these two topics at an Intermediate level to meet the needs of those just getting started with little experience, those with years of experience who want an update and learn about some procedures that are often misused or not well understood.

# What:SSW and Buffalo Model WorkshopWhen:November 2 and 3, 2012 (Friday and Saturday)Where:A location in Buffalo, NY (TBA)

Workshop details are being finalized. This note is just to ask you to **Save the Date** for those who are interested in this program or if you have friends or colleagues who might be interested (please let them know).

To get further information when it is available, **please send an email** with **Buffalo Workshop** in the subject box to Jack at: <jackkatz@buffalo.edu>

Also if you would like a complete form for the **Targeted Practice in Noise** training that is discussed in this issue; please send an email to Jack at the above email address.

For those interested in subscribing to **SSW Reports** (or for your favorite friends) please contact Kim Tillery at <ktillery@gmail.com>.

In an unrelated matter Mary Katherine Waibel-Duncan has requested that her name be deleted from an article, "Fisher's Auditory Problems Checklist: A Screening Tool for the Buffalo Model?" Volume 32, Number 2, 2010.

## SSW Reports

Targeted Training in Noise
Kids with APD Are the Nicest
When the Buffalo Model Results Don't Agree

Vol. 34 No. 2

#### May 2012

#### Targeted Practice in Noise Jack Katz

The Words-in-Noise (WINT) program has been out for a few years and I have been working with this type of training for decades. Finally, in the last few months I noticed that toward the end of the first round of therapy that a youngster was still having trouble adding an H-sound to the beginnings of words starting with a vowel, substituting the H-sound for words with other, mostly weak, consonants and deleting the Hsound on words beginning with it.

I began to realize that certain sounds had not improved with the Decoding training and the regular speech-in-noise work. So I tried a technique to improve the H-sound and it seemed to work well. Then I noticed, in working with other kiddos, that other sounds had been rather resistant to training. These were prominently voiceless plosives P and K and to a lesser extent the T. Also it was apparent that these sounds were often interchanged with the H. So I broadened the therapy to include all four sounds.

Better late than never, I gathered data and found a bunch of additional sounds that are of concern including some vowels. Hopefully the above information will help in understanding the procedure that is called Targeted Practice in Noise (TPN).

#### **Overview of TPN**

TPN uses noise from the WINT CDs plus live voice speech to expose a person to these challenging sounds in noise (and may be in quiet as well). Repetition, in a concentrated fashion in various contexts, is used to teach the brain to identify the sounds more accurately.

Originally I used TPN in the last part of Round-1 in therapy to be sure the child had these skills before ending auditory training. But then it seemed that being proactive and adressing more sounds and/or giving more repetition would be the better way to go.

#### Protocol

Figure 1 shows the TPN sheet for the Hsound-and-friends (HaF) that target these very common problems. The noise source is from any noise channel of WINT-3 (that is used with an audiometer) or on the new WINT-1 CDs the noise track (i.e., #9) that was added for TPN<sup>1</sup>.

A hoop is used to obscure the lower face to avoid a visual contribution. The therapist

<sup>&</sup>lt;sup>1</sup> Those who have the earlier WINT-1 version can upgrade for a small price plus postage by contacting Upstate Advanced Technologies <gsbusat.frontiernet.net>.

	la	lb	1c	1d	le		.2a	2b	2c		2e	2f
#	Core	Н	H+C*	Р	P+C		HP+C	K K	K+0		T+C	TK+C
1	E	he	he	pea	pea		E	key	key	/ T	T	Т
2	A	hay	hay	pay	A		pay	K	A	tay		K
3	00!	who	00!	poo	poo	1 - A	роо	c00	00.			C00
4	eye	high	high	pie	pie		eye	chi	eye			eye
5	0	hoe	0	poe	0		hoe	koe	koe		and the second	0
6	at	hat	hat	pat	pat		hat	cat	cat	t tat		cat
7	N	hen	N	pen	pen		pen	ken	N	ter		ken
8	is	his	is	piz	is		is	kiz	is	tiz		kiz
9	all	hall	hall	paul	all		haul	call	cal			all
10	ŏt	hot	hot	pot	pot		ŏt	cot	co	t tot	tot	tot
11	and	hand	and	pand	and		and	canne	d and	i tann	ed and	canne
12	old	hold	hold	pold	pold		old	cold	col	d tole	l old	told
13	art	heart	heart	part	art	8	part	cart	car	t tar		art
14	itch	hitch	itch	pitch	pitch		hitch	kitch	n itcl	n <i>titc.</i>	h titch	kitch
15	end	hend	end	pend	pend	-	pend	kenc	l ken	d ten	d tend	tend
	<u>3a</u>	3b	3c	3d	3e		4a	4b+	4c	4d	4e	4f
#	HP+C	HK+C	НРК+С	HT+C	НРТ+С		HP+C	HPT+C	HK+C	HKT+C	НРКТ+С	HPKT+0
1	pea	key	he	he	E		pea	T	he	key	pea	E
2	A	hay	pay	tay	hay		hay	hay	hay	A	pay	K
3	who	<u> </u>	who	two	00!		00!	poo	000	who	two	poo
4	eye	chi	chi	high	tie		high	pie	eye	chi	tie	eye
5	poe	hoe	koe	toe	0		рое	0	koe	toe	0	hoe
6	at	cat	at	hat	pat		pat	hat	cat	at	hat	cat
7	hen	hen	ken	ten	N		hen	pen	N	ten	ken	hen
8	piz	is	his	is	his		piz	tiz	his	kiz	his	kiz
9	paul	call	hall	haul	tall		paul	paul	hall	call	tall	hall
10	pot	hot	pot	hot	ŏt		ŏt	tot	cot	hot	hot	pot
11	hand	canned	and	and	tanned		and	tanned	and	hand	canned	tanned
12	hold	old	pold	old	pold		hold	old	cold	told	pold	pold
13	part	heart	part	heart	part		part	heart	art	cart	cart	heart
14	itch	hitch	kitch	titch	hitch		pitch	hitch	hitch	itch	kitch	pitch
15	pend	end	kend	tend	end		hend	pend	kend	kend	end	tend

Figure 1. The scoring portion of the H-and-Friends, Targeted Phonemes in Noise form.

explains that you will say some words, parts of words or nonsense words and the person should just repeat what you say. FYI: All of the other lists on this form have the same 15 syllables (called the "Core").

The TPN form is divided into four sections (#s 1 to 4) and each section is divided into 5 or 6 columns (shown as *a* through *e* or *f*). Make a mark next to any item that was in error during the training program which usually preceeds the regular WINT program. If you can show the error on the item, then that could be helpful later.

Now present the first column from section #1 with the "Core" syllables with or without noise the first time (depending on how young the child and how severe the problem). The "oo!" is the vowel in the word "two", "ot" is the short-O plus /t/ (as in "hot").

When noise is used; start presenting it fairly loud through the loudspeaker and maintain it for the entire section, if possible. Enter that information on the form so the next time you can raise it if the person did quite well (3 errors or fewer). If the person makes a mistake, pause and give it again. If necessary turn off the noise. Initially the Core syllables (1a) are given. The most common error is that "and" is said as "end". See if this can be improved; as it will come up again and again later on. You can say, "and" a few times and then repeat the item in noise.

At the beginning it is very helpful to tell the person what the particular list consists of. This may not be important after the first 2 sections. For list 1b explain that these items will have the same syllables but before each you will now say the H-sound. Before 1c explain that for the next list it will be the same syllables but some of them will have an H-sound in front and others not. This is the first real discrimination task to determine H or no-H.

List 1d introduces the P-sound so explain that you will be putting a P-sound before each of the syllables (as before; some will be real words and others not). The last column (1e) contains the Core syllables or the P in front of them. Indicate at the bottom how many errors there were. If it was a disaster, not likely, then repeat section #1 the next time and consider lowering the noise level. If it was fine you can go on to the next section if you are pressed for time and it was easy for the child.

It is not hard to know if the task was easy or not. When you say the item and the person repeats it back quickly you can move ahead more quickly. Pretty soon it is a game how quickly the child can respond. This is excellent because speed is needed in real life. The person will become so much more confident and the presence of noise will not intimidate them as much as before.

Section #2 starts with a review of both sounds from the previous section vs. the Core. Then the sounds K and T are introduced in the same way and contrasted with each other and the Core sounds in 2f. Section #3 has combinations of two or three of the sounds and in section #4 two, three or all four are contrasted with the Core.

We would expect gradual improvement in these sounds on WINT. But if significant improvement is not obvious then parts of sections, or whole sections can be repeated depending on the results. It is because of this aspect and the following ones that I have begun to give TPN earlier and earlier in Round-1. However, I think it best not to start TPN before about session #6.

If other sounds appear to be problems you can modify the HaF list to accommodate other consonants. For vowels I plan to use the following syllables:

1)	sko	nade	rig	push	bain
2)	vai	cast	fry	cow	goat
3)	deb	lose	we	mel	shoe

I think you, or those who provide this type of therapy, will find TPN very useful to improve understanding of sounds that have not responded sufficiently well in noise. At the same time it is quite reinforcing and enjoyable for the children (and adults I presume).

\* \* \* \* \* \* \*

#### Just Little Kids Jack Katz

Kids with APD are generally the nicest people. And when I come across one who doesn't fit that description I think of my Great Grandmother's sage words. She told her children and grandchildren, "You never know why a person behaves as they do, but if you did know, you would not be angry with them."

As a group I think they are just as smart as any other group, but I suspect because of their experiences they are a little more caring and a little bit more appreciative than the next child. For these reasons they are even sweeter and more precious than other groups of kids. For me, I'm sure they keep me young. I try to keep up with them, learn from them and even teach them a thing or two. Here are some mostly recent examples that come to me about these kids.

#### Sweet

I heard about a research project that put a rat in a see-through plastic box. A second rat that was acquainted with the rat started clawing at the plastic; apparently to make a hole to free this friend, but the plastic was too hard. However, the rat did not give up and instead pushed on the walls until at last a hidden door was opened and the first rat was freed. It appears that rats have inborn compassion, so this is not just a human trait. This story reminded me of a child with whom I work, who was brought up in an orphanage until 9 months of age. This baby was so compassionate with other babies that when other babies were frightened or crying the people at the orphanage would put this child in the same crib as the fussy one and she would soothe and calm down the other infant. Her mother said that she is the same way now with her younger sister and with other people. I am pleased to report that although she is doing very well in therapy she is still just as nice to others.

\* \* \* \* \* \*

I tested a little child who not only had a severe APD but other significant physical disabilities. She was struggling in school even though she was quite bright. I hated to push her too hard and cause her further anguish. While I was explaining the test results to her grandmother she would come over and cuddle with her grandma. When we were finished I thanked her for working so hard and spontaneously she came over and gave me a hug too. \*\*\*\*\* Three of the children I have worked with are my own grandchildren. One night the family went out to a restaurant for dinner. When we left we saw nickels, dimes and quarters in the street. Our granddaughter and her friend scooped up the change and our granddaughter excitedly exclaimed, "I can put this in the *Tsudukah* (charity) box!" Her friend exclaimed, "Not me!" I suspect that her friend had the more typical response. Could it be that APD played some sort of difference?

\* \* \* \* \* \*

A little boy with severe APD and moderate hearing loss has the biggest smile and the biggest blue eyes. When he was out of earshot I told the grandma what a wonderful child he is. She then told me that she was playing a game of *Concentration* (where you put cards face down and try to match them). He beat her every time. He felt uncomfortable winning each time so he intentionally lost so she could win too.

#### Yes, Sweet But Much More

One of the techniques that I use to keep the blood in the brains of the kids circulating is to get them out of their seats to "help me" with the equipment. They enjoy this and it breaks up the challenges that they face in therapy. Pretty soon they learn the audiometer and the procedures.

One day I was doing speech-in-noise training using WINT-3 with a little girl. Between conditions, where I set up the next noise level or switch ears, the mom asked me a question. When I started the CD again the child gently and cautiously said, "Dr. Katz... you forgot to raise the noise." I was so impressed that she knew that I had not increased it and in such a nice way let me know. Of course, I thanked her very much. Later on the mom had another question and when I resumed the therapy the child in an embarrassed voice said, "Uh... Dr. Katz, ...you forgot to raise the noise again." \* \* \* \* \* \*

After a reevaluation I asked a mom if she or the boy's teachers had noticed any improvement from the therapy. The mom said that she really didn't know and she hadn't asked the teacher. Just then, the little boy, who was obviously monitoring what we said from where he was sitting drawing pictures, piped in, "Oh yes, now I can hear what everyone says in the cafeteria." \* \* \* \* \*

Of course, what kids don't say is also interesting. A mom said, "Tell Dr. Katz your good news on your report card." The child said, "What good news?" The mom said, "You got all As and Bs for the first time!" [He probably said, "Oh yeah, that."] \*\*\*\*\*

That's similar to what happened this week. A mom said that Billy had good news that he wanted to tell me. Billy, of course, said, "What good news?" So his mom told me that he got the second prize in a class writing contest.

\* \* \* \* \* \*

I will end with another story that you might have heard before about another granddaughter. She had the poorest score of any kid I had worked with on WINT the first day of therapy. But unlike other children she did not make some good improvement the next session, in fact, she stayed the same. I got concerned the third session when she improved by just one point. Pretty soon things started to turn around for her and she made rapid progress and ended up where most kids do. But the next to last session she said, "Grandpa Jack, how many decibels was that (referring to the noise)?" I said, it was 60 dB. She said, "Sixty-decibels! It sounded like 2-decibels to me!" \*\*\*\*\*

You will be interested to know that therapy makes the kids better looking too. Another time.

#### When Buffalo Model Results Don't Agree Jack Katz

Yesterday I tested a child and you can be sure that this is not an isolated incident. The Buffalo Model tests make up a powerful battery and the Buffalo Model Questionnaire-Revised (BMQ-R) (Katz & Zalewski, 2011) is an excellent tool for various purposes in both evaluation and rememdiation. (That's my opinion, but you can quote me on that.)

Usually, the Buffalo tests and the BMQ-R provide comparable information for understanding the individual. When I was a kid we used to say, "When two people always agree, one of them is unnecessary." The same is true for tests and questionnaires. We benefit from both the similarities and also from the lack of correspondance. The similarities tell us that we are on the right track and the lack of correspondence gives us options that we may have missed.

The questionnaire that the mother filled out showed that her daughter had 3 out of 8 items that are associated with DEC. That agrees with our tests with 9/16 indicators. She did not circle "reponds slow/delayed" or "speaks slowly" but revealed this later on when it was noted on the test. This aspect may not have come to mind when filling out the form but she readily identified these problems. For TFM the mom noted 8 out of 14 questions dealing with these issues. The test battery showed 5 indicators out of 13. So both agreed on this category as well.

Where the two sources of information did not agree was on Integration and Organization. These are generally the areas of disagreement when there is one. The reason appears to be because there are fewer test and BMQ-R signs and most are not as strong as others. In addition "internal dynamics" can hide these signs. For example, the Type-A pattern that is the only measure on the battery that is a strong indicator of INT. If there are many errors due to other issues (e.g., especially DEC errors) this can throw off the Type-A by adding enough errors to other columns that could mask this sign. After successful therapy we sometimes see the Type-A show up when the other errors yield to the basic therapies.

The same is true for ORG in that reversals can be reduced because if there are 2 or more errors we do not count the item as reversed. There are only two indicators of ORG on the battery so we may not see this category as easily. In a similar fashion, there are only 3 ORG items on the questionnaire and only one is strong (i.e., sequencing).

Let's see how this played out for this youngster. We found a clear Type-A, but no reversals on either test. On the other hand the BMQ had 0/6 INT items and 1/3 ORG. Thus, the questionnaire was just the opposite with INT no and ORG yes! So how do we resolve this and what does this tell us?

When I saw a Type-A I thought this is probably correct. Only when we were in the post-testing conference was the severity of the child's issues revealed. The mother indicated that the school felt that she was dyslexic, but an SLP said no, so she did not circle that item. I asked wether the child had severe reading or spelling (for which she's getting special help in and out of school). The mom said yes, but did not circle this item on the questionnaire. In discussing the child's behavior she said that her responses were sometimes extremely delayed which was not circled for INT. So a revised questionnaire would have supported the Type-A.

There was one BMQ item suggesting ORG that was "keeping things in order". Because I saw no mention of reversals and sequencing was not circled and the other ORG characteristic was not suggested; I was of the opinion that it probably was not a significant issue. But given the foregoing I inquired of the mom if the child had sequencing problems. She said no and she keeps her room very neat. So I suspect that one item was circled in error. There were also some other inconsistencies.

I am not picking on this mom. And I am surely not suggesting that the tests are always right. Often in these situations I indicate that INT or ORG cannot be "ruled out" when the parents see these issues and my data fail to support them. Sometimes we see a single ORG indicator because of one reversal on the Phonemic Synthesis test, that does not give me much confidence, especially if the family does not circle any of the 3 signs on the BMQ. In these cases I generally indicate in my report and there might be a mild/borderline ORG problem. When the opposite is true I generally indicate there may be a mild/bordeline problem or that it may be in the visual (or another domain).

Having a second view of the person is a great advantage. Even when they differ it gives us another option to consider. Therapeutically we don't deal with ORG and INT before basic skills are improved; so fortunately we have some time to determine if these issues need to be addressed.

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If you would like a copy of the Targeted Practice in Noise form please email me <jackkatz@buffalo.edu>.