

Administration Instructions:
IT-MAIS

Infant-Toddler Meaningful Auditory Integration Scale

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SCORE SHEET

Infant-Toddler Meaningful Auditory Integration Scale (IT-MAIS)

Name _____ Informant _____ Date ____/____/____

Examiner _____ Device _____ Interval _____

Question	Parent Report				
	Never	Rarely	Occasionally	Frequently	Always
1	0	1	2	3	4
2	0	1	2	3	4
3	0	1	2	3	4
4	0	1	2	3	4
5	0	1	2	3	4
6	0	1	2	3	4
7	0	1	2	3	4
8	0	1	2	3	4
9	0	1	2	3	4
10	0	1	2	3	4

TOTAL SCORE _____ /40



Description

The Infant-Toddler Meaningful Auditory Integration Scale (IT-MAIS) (Zimmerman-Phillips, 2000) is a modification of the Meaningful Auditory Integration Scale (MAIS) (Robbins, et al., 1991). It is a structured interview schedule designed to assess the child's spontaneous responses to sound in his/her everyday environment. The assessment is based upon information provided by the child's parent(s) in response to 10 probes. These 10 probes assess three main areas: 1) vocalization behavior, 2) alerting to sounds; and 3) deriving meaning from sound. Specific scoring criteria have been developed for each of the 10 probes.

Administration

This parent-report scale is administered with an interview format. This technique avoids "leading" the parent to provide desired responses and also discourages yes-no answers. The questions are designed to elicit a dialogue between the examiner and informant. For example, "Tell me about the sounds that Johnny responds to in his environment" will elicit more information from the parents than will a question posed in the following manner: "Does Johnny respond to any sounds at home?" **The IT-MAIS should only be used as an interview tool. Having parents fill out the form themselves invalidates the measure.**

It is recommended that the examiner review the probes and all possible answers prior to administering the scale to a parent. The parent is instructed that s/he will be asked a number of questions regarding their child's responses to sound. The parent should be encouraged to think of as many examples as possible. **The examiner should record the parent's responses on the test form or score-sheet. Note that credit is given only for spontaneous responses that occur without prompting. Responses that occur when the child is in a structured "listening set" do not receive credit.** Part of the task requires the parent to assign percentages of the time that

the child is able to consistently respond to sound in a specific situation. Some parents will have difficulty with this task. Usually the probes will heighten the parent's awareness of the targeted behavior so that in subsequent evaluations, the parental feedback becomes more accurate. Be flexible in your interview format. Sometimes in asking one question the parent will provide the answer to another one. If you are pressed for time, **DO NOT give the IT-MAIS to the parent to fill out**, rather, try to set up a future time where you can thoughtfully conduct the interview over the phone.

Scoring

Performance is scored in terms of the total number of points accrued out of 40 possible points. Each question has a potential of 0 (lowest) to 4 (highest) points. Scoring is often based on the percentage of time that a child demonstrates specific auditory abilities (i.e. "Would you say that Sally is able to do this more than 50% of the time or less than 50% of the time?"). It is important to adhere to the strict scoring system described in each of the target questions.

References

- Zimmerman-Phillips, S., Osberger, M.J., & Robbins, A.M. Assessment of auditory skills in children two years of age or younger. Presented at the Vth International Cochlear Implant Conference, New York, NY, May 1-3, 1997.
- Zimmerman-Phillips, S., Robbins, A.M., Osberger, M.J. (2000). Assessing cochlear implant benefit in very young children. *Annals Otology, Rhinology, Laryngology* (Suppl.185), Vol. 109, No. 12, Part 2. 42-43.
- Robbins, A.M., Renshaw, J.J., and Berry, S.W. (1991). Evaluating meaningful auditory integration in profoundly hearing impaired children. *American Journal of Otology*, 12 (Suppl.), 144-150.



