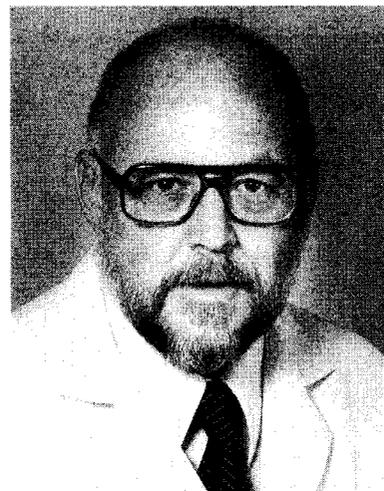


Editorial

Testing with Marshmallows



The accurate diagnosis of central auditory processing disorder (CAPD) is one of the heaviest responsibilities that the audiologist bears. On the one hand, it is important to identify every child with the disorder in order to initiate counseling and appropriate intervention. On the other hand, overdiagnosis of the malady strains our credibility with professionals in related fields who deal with the many and complex problems of childhood.

One of the principal problems leading to overdiagnosis is reliance on diagnostic techniques based on the child's behavioral response, especially techniques based on absolute performance scores. Such measures are, regrettably, subject to many extra-auditory influences.

In this issue of *JAAA*, authors Silman, Silberman, and Emmer highlight the importance of just one such influence, motivation to cooperate in the testing activity. They report extremely interesting data on three children. Each had been diagnosed as CAPD on the basis of behavioral measures. In every case, the child's performance was shifted into the normal range by the simple expedient of reinforcing correct responses with the child's favorite toy or treat. In the first case, performance scores on the Competing Sentences subtest of the Willeford battery, initially abnormally low, were brought into the normal range by marshmallow reinforcement. The child's favorite treat was roasted marsh-

mallows. When she was told that each time she correctly repeated two words she would be rewarded with a roasted marshmallow, her scores improved from 0 percent to 100 percent on the right ear and from 60 percent to 100 percent on the left ear. In the second case, quarters were used as reinforcement and scores on the Filtered Speech subtest of the Willeford battery increased from 64 percent to 84 percent on the right ear and from 28 percent to 80 percent on the left ear. In the third case, reinforcement with baseball cards raised scores on the Competing Word and Filtered Word subtests of the SCAN test from 3 standard deviations below the mean to less than 1 standard deviation below the mean.

There is some humor in the mental image of Dr. Silman and his esteemed colleagues roasting marshmallows to provide a stockpile of reinforcers. It is offset, however, by the potentially tragic consequences of misdiagnosis in each of these children before their parents sought a second opinion.

We, as a field, cannot long tolerate the kind of false positive results illustrated by these three cases. This paper serves as a sobering reminder of the long road ahead as we seek to develop more satisfactory methods for diagnosing CAPD in children.

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