

Letters to the Editor

MORE ON CAPD

To the Editor:

A recent article in *JAAA* reported on the use of reinforcers during CAP assessment, resulting in normal or near-normal test scores (Silman et al, "Central Auditory Processing Disorders and Reduced Motivation: Three Case Studies," 11:57–63). The apparent conclusion seemed to be that because these three children performed much better with reinforcers than without them, they did not have processing problems but only reduced motivation. This conclusion seems to leapfrog over many other questions still waiting to be explored. For instance, can we confidently rule out a processing problem because a passing score was obtained using highly desirable reinforcers? Is it possible that children, if highly motivated, will intensify their efforts and improve their processing performance for a short period of time, only to deplete their energy reserves and return to below-average abilities? Would this inability to perform consistently at an average level across the school day qualify as a processing problem? Is a nonreinforced condition more representative of a child's learning environment and therefore a more accurate picture than a token-reinforced condition?

These questions arose from a 5-minute conversation with a school psychologist, who, after reading the article, pointed out that most of us can work extra hard for a stretch of time on a difficult cognitive task if the reward is desirable enough, but most of us cannot maintain the energy required to do so all day, every day, no matter how attractive the reward. We know that children with hearing loss can fluctuate in their efforts to concentrate, attend, discriminate, and identify auditory signals (all cognitive tasks), so it should follow that some children without hearing loss can also fluctuate when faced with the same tasks. But is it a processing problem or is it reduced motivation? The use or nonuse of reinforcers does not seem to directly answer this question.

Many audiologists agree that when it comes to CAP, "what we don't know is a lot." Silman and his colleagues are to be thanked for bringing to light yet another variable to CAP assessment for consideration.

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THE AUTHORS REPLY

To the Editor:

We are in accord with English that the children in our study (Silman et al, "Central Auditory Processing Disorders and Reduced Motivation: Three Case Studies," 11:57–63) did significantly better on a central auditory processing battery under the condition of reinforcement than under the condition without reinforcement. We, however, attribute the improvement to motivation. Dr. English suggests that children with central auditory processing disorders can obtain normal scores on a central auditory processing test battery when they "intensify their efforts," if highly motivated; after such intensification, however, the children's "energy reserve" becomes "depleted," leading to reduced performance afterwards in a nonreinforced environment. First, we are unaware of theories relating central auditory processing disorder to reduction or impairment in energy reserve. Central auditory disorder has been related to a problem in the central auditory pathway, or its mechanisms or processes, which may or may not be demonstrable on imaging or electrophysiologic studies. Also, the concept of "energy" is very vague to us. What kind of energy is Dr. English referring to? Our subjects could "concentrate, attend, discriminate, and identify auditory signals," that is, demonstrate normal central auditory processing abilities, when they were motivated. So they did not have a central auditory processing disorder. These three children were cognitively normal.

Second, the children would not attend to the task until a reinforcer that was desirable to them was used. Thus, any reinforcer would not have sufficed—only a reinforcer that matched the child's interest worked. The use of reinforcement should not affect performance on a central auditory processing task by a child with a central auditory processing disorder. If a lack of motivation leads a child to ignore auditory stimuli with reduced extrinsic redundancy, then the ramifications for management are significant.

Such children should be referred for evaluations of their psychological/emotional status for possible psychological/emotional treatment of their motivational problem. Certainly, placement in the standard central auditory treatment program would not address the fundamental issue of lack of motivation.

We thank Dr. English for raising an interesting question.

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