LETTERS TO
THE EDITOR

Is Sensory Integration Treatment a Panacea?

I was pleased to learn that Angelo, in “Effects of Sensory Integration Treatment on the Low Achieving College Student” (October 1980 AJOT), was concerned about low-achieving college students and attempted to remediate some of the difficulties these students experience. However, I was distressed that the article seemed to be guilty of grievous errors in its underlying assumptions related to the training program for low-achieving college students. It is my understanding that the plasticity of the nervous system is not at all amenable to “reorganization” at the age of the students cited. Rather than focus on Angelo’s article, I believe the time has come to address the areas in which sensory integrative techniques are being applied and the boundaries or lack of boundaries in those areas.

A brief review of the literature in occupational therapy during the last 18 months makes even the most casual observer aware of the number of articles having sensory integration as their treatment base. Is sensory integration a panacea? Is it appropriate to all dysfunctions and therefore appropriate for none?

Any profession must be its own sternest critic if it is to call itself a profession. Yet a critical evaluation of sensory integration, to my understanding, has not been undertaken by occupational therapists. It is time we started acknowledging that sensory integration is not a panacea, nor is it correct to extrapolate a basic neurophysiologic model appropriate for one category of patients to another without first establishing the statistical validity of such an extrapolation. It is indeed unfortunate that sensory integration, as effective as it may be, will be weakened and perhaps discredited by occupational therapists who fail to conduct proper experiments in the application of new approaches to remediate dysfunction through the use of sensory integration. For example, in the Angelo article, there is no control group by which to compare the experimental group. I would suggest that the increases in the Nelson-Denny Comprehension and WRAT values were spurious associations. (A practice effect should also have been controlled.)

Many articles in our literature on sensory integration assume that neural development is linear. Nothing could be further from the truth. It is my considered opinion that there should be some definite steps taken to achieve an objective review of the appropriate use of sensory integration. Otherwise, occupational therapists may become too enamored with sensory integration and fail to give it the critical evaluation any sound and scientific theory deserves.

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Author’s Response

The subject of the plasticity of the nervous system has not been thoroughly researched. Studies support the statement that the younger the individual, the more plasticity there is in the brain. Is this a valid reason to deny an older individual treatment?

Moore, Woodruff and Birren, and Chaplin and Demers (1-3), all discuss the presence of plasticity. They do not discuss a definite time period when the brain loses its plasticity. In the Woodruff and Birren text, the results of a study on old rats support the notion that there is no general deterioration of brain function. This study, albeit on rats and not on humans, is a beginning in obtaining more knowledge about plasticity.

In addressing Trujillo’s concern regarding research on sensory integration, I would like to recall the purpose of a theory—which is to stimulate research so that new principles will be generated. New principles will either support the theory or alter the way it is viewed, making it clearer and more comprehensive. Theories are not permanent but forever becoming more refined. Without considerable research done on SI, how are we to know when its use is appropriate or not appropriate? Much research is needed to better define SI, incorporate new definitions, and formulate new hypotheses.

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REFERENCES

At Long Last

Upon reading the “Effects of Sensory Integrative Treatment on the Low-Achieving College Student” (AJOT, 34: 671-675, 1980), I felt greatly relieved by the awareness and nonsedentary action that the faculty at Texas Womans University, School of Occupational