

Certification in Administration and Interpretation of the Sensory Integration and Praxis Tests

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Key Words: tests, by title, Sensory Integration and Praxis Tests

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This article was accepted for publication March 1, 1990.

The Sensory Integration and Praxis Tests (SIPT) (Ayres, 1989) comprise 17 subtests revised from the Southern California Sensory Integration Tests (SCSIT) (Ayres, 1972) and supplemented with newly designed tests of praxis ability. The credentialing process for clinical use of the SIPT is currently administered under the auspices of Sensory Integration International, Torrance, California.¹ This process involves a five-step sequence of course work and evaluation in which the participant (a) acquires knowledge of sensory integration theory, (b) becomes trained in the technical aspects of SIPT test administration, (c) obtains information that enables interpretation of SIPT results, (d) is observed by a qualified evaluator for testing proficiency, and (e) successfully completes an objective competency examination.

Sensory Integration International first implemented the SIPT certification process in February 1986 with an updated sensory integration theory course, as the SIPT normative and validity data analyses were in their final stages. The first SIPT test administration course was held in the fall of 1986 and the first competency examination was given in spring 1989. In addition to sponsoring courses, Sensory Integration International has approved courses in three related areas (theory, test administration, and interpretation), which are offered by several universities across the country as part of their graduate occupational therapy programs. These courses may interest those who wish to obtain graduate credit for their certification studies. Sensory Integration International, however, does offer continuing education units for completion of their courses.

SIPT Certification Course Work

Sensory Integration Theory

This 3-day course, which explains the underlying neurobiological mechanisms on which Ayres's theories are based, is offered periodically by Sensory Integration International at various sites across the United States and Canada. (Graduate occupational therapy courses may vary in format but provide similar information.) Although this course is the initial phase of the certification process, it offers a valuable experience to those who desire simply to understand the theoretical background of sensory integration. Thus, this course is open to parents as well as teachers and clinicians from fields other than occupational and physical therapy. This course is also valuable for therapists working with populations for whom use of the test instrument is inappropriate but for whom insights

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about sensory processing deficits would add perspective to clinical observations and treatment approaches. The following topics are covered:

- A general neurobiology review.
- Neuroanatomy, function, and dysfunction of the vestibuloproprioceptive and somatosensory systems.
- Sensory registration, attention, and arousal mechanisms in the brain.
- Basic anatomy and perceptual processing in the visual and auditory systems.
- Theory and research on hemispheric specialization and lateralization.
- Aspects of motor control, praxis, and dyspraxia.
- Application of neurobiological concepts to treatment design.
- An introduction to the SIPT battery and its purpose.

Skills Acquisition

This 4-day intensive workshop familiarizes participants with the purposes of each subtest of the SIPT and teaches the standardized procedures that must be adhered to in the testing of children. This course also emphasizes the importance of clinical judgment and of the maintenance of professional standards in the SIPT's proper use. The format involves the use of large lecture-style didactics combined with small group demonstrations and individual assistance. Some practice time is provided during class hours, but the bulk of practicing must be done in the evenings and, most importantly, continued until the participant's observation session. The prerequisites for acceptance into the course are registration as an occupational therapist, physical therapist, or neuropsychologist; completion of a Sensory Integration International-approved theory course within the last 5 years; and satisfactory completion of a college-level statistics or test and measurements course. Each participant must either bring his or her own test kit to the course or prearrange to share a kit with a partner. All participants must bring their own copy of the *Sensory Integration and Praxis Tests* manual (Ayes, 1989).

After completing the test administration course and an appropriate period of practice, including administering the SIPT to at least 10 children, the participant may schedule an observation, or checkout, session with a qualified observer. The session takes about 3 hr and requires the participant to administer part of each of the tests to another adult or to the observer. The purposes of the observation are for the observer to provide the participant with feedback about his or her proficiency with testing skills, to clarify questions the participant may have, and to reiterate important points from the training, as necessary. Un-

like the SCSIT certification procedures, in which the observation of test administration skills was scored on a pass-fail basis, the SIPT observation only needs to be completed. The observer may, if the participant is extremely unprepared, discontinue the observation until a later time. Other unresolved testing difficulties may lead the observer to recommend that the participant take part in another observation session. The participant can then request an additional test observation, but at his or her own expense. Completion of an observation is not required for admittance into a test interpretation course, but it is required for the taking of the competency examination.

SIPT Interpretation

Only participants who have completed the first two courses of the certification sequence may attend this 3-day course, which involves the following:

- A historical overview on measurement in sensory integration and how it has evolved.
- An explanation of relevant statistical concepts and their application to analysis of SIPT data.
- A detailed description of each SIPT subtest, including rationale, sensory systems tapped, cognitive and motor demands, related clinical observations, reliability and validity data, and its relationship to other SIPT subtests.
- An explanation of the major SIPT diagnostic groups as identified through cluster and discriminant analyses and meaningful score patterns as identified through factor analysis.
- For each subtest, a description of the performance of children from several neurological dysfunctional groups (e.g., minimal brain dysfunction, mental retardation, spina bifida, language disorder, cerebral palsy, autism, and previously identified sensory integrative disorder).
- Application of the preceding content to a critical analysis of the Western Psychological Services (WPS) ChromaGraph results and other clinical data as well as to correct interpretation, professional reporting, and effective treatment recommendations.

The course instructors present a variety of actual cases to illustrate the interpretative process, and the class participants can take part in group discussions that use problem solving to reinforce their critical reasoning skills.

Competency Examination

The objective, multiple-choice examination serves to establish whether the participant has acquired a basic foundation in the neurobiological theories support-

ing sensory integration as well as minimal competency in SIPT administration, scoring, and interpretation. The examination covers

- Sensory integration theory.
- Correct practices in test administration and scoring.
- Psychometric aspects of SIPT tests.
- Interpretation of actual WPS ChromaGraphs.
- The manner in which the reporting of results should be handled.

Before they are allowed to take this examination, the participants must have completed all of the previously mentioned steps and requirements.

Reasons for Therapists to Become Certified

Certification in administration and interpretation of the SIPT is an option for therapists who wish to use the instrument in their practice. A non-SIPT-certified clinician can legally administer the SIPT, and Western Psychological Services does not require the test purchaser to be SIPT certified, although they do recommend that the purchaser be trained in its use. Western Psychological Services strongly recommends, however, that the purchaser have a graduate degree, but because sales are often made to institutions rather than to individuals, this cannot be strictly enforced. Occupational therapists choose to go through the SIPT certification training process because they recognize that the SIPT is a state-of-the-art instrument for the objective diagnosis of sensory processing deficits in persons with learning disabilities. The capabilities of the SIPT have been greatly expanded over those of the SCSIT. Much effort has gone into the standardiza-

tion process with regard to enhancing the test's reliability and validity, but a reliably measured normative population does not guarantee high interrater consistency in the clinical situation. The child being evaluated clinically must be tested in a manner that replicates as closely as possible the procedures used on his or her normative counterparts or the comparison loses meaning. By most therapists who used it, the SCSIT was judged to be complex to administer, score, and interpret. Most therapists familiar with it would agree that the SIPT is more challenging, and few would attempt to learn how to administer the test simply by reviewing the manual. The SIPT certification course instructors make every attempt to ensure that the course participants receive the same information on how the test should be administered, scored, and interpreted. No certification process is foolproof, however, and such procedures in any professional field of endeavor are usually designed to provide only essential competencies in the areas addressed. Each therapist is responsible for developing and maintaining his or her skills in SIPT administration and interpretation. The assumption of such responsibility enables families, other professionals, and employers to have a greater degree of confidence in the SIPT-certified therapist's knowledge, skills, ethics, and reports. ▲

References

- Ayres, A. J. (1972). *Southern California Sensory Integration Tests manual*. Los Angeles: Western Psychological Services.
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