

Getting to know the Evaluation in Ayres Sensory Integration (EASI)



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What is the EASI?

The Evaluation in Ayres Sensory Integration (EASI) is a set of standardized tests designed to measure core constructs identified by decades of research conducted within the Ayres Sensory Integration® (ASI) framework. The functions assessed by the EASI are foundational to learning, behavior, and occupational engagement (Mailloux et al., 2018).

ASI is an evidence-based approach (Smith Roley, Schaaf & Mori, 2018), with a manualized intervention (Schaaf & Mailloux, 2015), including a well-established fidelity measure that can ensure accurate application (Parham et al., 2011; Schoen et al., 2018; Schaaf et al., 2018; Watling et al., 2018). In line with The American Occupational Therapy Association’s 2025 vision, the EASI focuses on supporting OTs to “maximize health, well-being, and quality of life for all people, populations, and communities through effective solutions that facilitate participation in everyday living” (AOTA, 2019, p.1).

The EASI tests measure various aspects of sensory integration and praxis functions in children ages 3 to 12 (see Table 1) with established reliability and validity (Lamash, et al., 2022; Mailloux, et al., 2021; 2023; Schaaf, et al., 2023). The EASI is unique in that it is the first set of performance-based assessments with normative data from over 80 countries and available in numerous languages, with cost and equity in mind to allow ease of global access to qualified therapists around the world. Cross-cultural adaptation outside of the U.S. has been reported and the inclusion of a broad global normative data set provides strong representation of children worldwide (Gándara-Gafo, et al., 2021; Holmlund, et al., 2021, Lamash et al., 2022). The EASI tests are designed with consideration

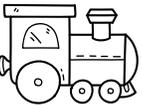
of low cost material accessibility, consisting mainly of common objects found in the home or a clinic, such as pipe cleaners, crayons, water bottles, therapy balls, and yoga mats. Additionally, 3D printing allows therapists to obtain novel tactile shapes through a verified printer. Trained therapists have opensource access to print test sheets and forms and may score an unlimited number of clients per year using the EASI Scoring Program (ESP). These features are aimed to remove previous financial barriers to comprehensive testing in ASI.

The EASI provides assessment in the sensory foundations essential for successful participation in everyday activities and learning. The tests include measures of vestibular, proprioceptive, tactile, and visual sensory perception, praxis, visual motor integration, postural and bilateral control, and sensory reactivity. Scores from the EASI provide practitioners with a comprehensive tool to understand underlying sensory motor foundations of a child’s strengths and challenges, which, in turn, aid in identification of supports and barriers for successful occupational performance.

A clear understanding of these foundational functions guides precise intervention, allowing a therapist to target individualized outcomes affecting engagement and participation in a variety of occupations and co-occupations (Table 1). Assessment data also drives activity and environment adaptations, so that a therapist can tailor them to capitalize on a child’s underlying strengths. In addition, early studies of the tests of the EASI show strong reliability and validity (Lamash et al., 2022; Mailloux et al., 2023, 2021; Schaaf et al., 2023).

The EASI provides a robust set of standardized, norm referenced, performance measures of sensory integration that aim to help practitioners better understand the children they serve. With low cost, a robust and representative normative sample, and ease of access to materials and scoring, the EASI has the potential to reduce healthcare disparities and barriers, allowing all children to have access to quality and specialized care.

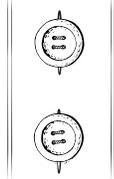
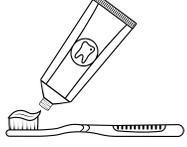
Table 1: Description of the EASI Tests

Test	Assesses child's ability to:	Examples of implications for everyday life	
01 Visual Praxis: Designs	Copy lines and geometric figures	Using writing utensils for drawing or writing, especially when copying from a model	
02 Visual Perception: Search	Find objects within a rival background	Finding objects or clothing in a drawer or closet using vision; finding information in a textbook or on classroom walls, locating a familiar face in crowd	
03 Praxis: Ideation	Come up with ideas for actions and demonstrate them	Initiating tasks and play; problem solving ways to tackle tasks such as how to use a tool or a toy or possible ways to interact in social situations	
04 Praxis: Positions	Imitate various positions	Imitating positions in dance, martial arts, P.E. or other sports activities (e.g. how to hold a tennis racket, or how to stand and be prepared for a ball coming into a goal area)	
05 Postural Control	Make effective postural adjustments	Sitting upright in a chair, adjusting body during movement such as swinging, navigating a crowded school environment	
06 Balance	Maintain static balance	Staying upright while standing on one foot to put on underwear, socks or pants; maintaining balance while kicking a ball, standing in line or walking on a narrow path; riding a 2-wheeled bicycle	
07 Proprioception: Force	Grade force of movement	Pouring juice without spilling; using tools without dropping or breaking them; using appropriate force when pressing on a pencil, hugging a friend or petting an animal; placing papers into a folder or envelope	

Description of the EASI Tests

Test	Assesses child's ability to:	Examples of implications for everyday life	
<p>08 Ocular: Motor & Praxis</p>	<p>Track an object, dissociate head and eye movements and imitate eye positions</p>	<p>Keeping one's place while copying from a board, reading, and writing; locating a moving object such as a thrown ball; looking toward the correct place or direction to which someone is pointing</p>	
<p>09 Praxis: Sequences</p>	<p>Accurately imitate a series of movements</p>	<p>Copying dance moves; sequencing steps of daily routines (e.g., getting ready for school, dressing), following routines in a classroom</p>	
<p>10 Bilateral Integration</p>	<p>Smoothly coordinate movements between both sides of the body</p>	<p>Cutting, buttoning, zipping, swimming, folding laundry, dressing; pedaling a bicycle</p>	
<p>11 Praxis: Following Directions</p>	<p>Follow novel verbal directions</p>	<p>Executing actions based on verbal instructions from teachers, parents, or others</p>	
<p>12 Vestibular Nystagmus</p>	<p>Demonstrate a vestibular-ocular reflex following rotation; of a typical duration in seconds</p>	<p>Remaining upright for necessary durations of time (e.g., in class or while walking); shifting visual gaze from a worksheet to the board; understanding spatial directions (e.g. up/down; right/left) and maintaining attention and alertness at appropriate levels throughout the day</p>	
<p>13 Visual Praxis: Construction</p>	<p>Plan and construct with objects in space</p>	<p>Putting toys away; organizing a backpack or desk, arranging clothes to ease in dressing; setting a table; folding and putting away laundry; completing craft activities</p>	
<p>14 Proprioception: Joint Position</p>	<p>Replicate positions following being placed in that position</p>	<p>Demonstrating awareness of personal space awareness, positioning body for writing, eating, or play activities such as throwing a ball</p>	

Description of the EASI Tests

Test	Assesses child's ability to:	Examples of implications for everyday life	
<p>15</p> <p>Auditory: Localization</p>	<p>Point to the location of sounds without using vision</p>	<p>Orienting to voices, finding someone who has called your name, locating a ringing phone, alarm, or siren</p>	
<p>16</p> <p>Tactile Perception: Localization</p>	<p>Precisely identify the location of touch without looking</p>	<p>Turning when tapped on the shoulder; positioning objects such as a spoon or cup in the hand; adjusting clothing such as socks or sleeves on the body; bringing a towel to body parts that need drying after a bath or time in a pool</p>	
<p>17</p> <p>Tactile Perception: Designs</p>	<p>Perceive and replicate a design drawn on their hand or forearm, without looking</p>	<p>Writing letters without looking; washing soap off the body; recognizing and responding to food spilling from the mouth or a runny nose; pulling a sleeve or pant leg on in the right direction</p>	
<p>18</p> <p>Tactile Perception: Shapes</p>	<p>Identify items in their hands (stereognosis)</p>	<p>Finding items in a bag or drawer without looking; differentiating the parts of a clasp on a necklace; positioning fingers on a pencil, feeling the difference between a button and buttonhole to manage buttons</p>	
<p>19</p> <p>Tactile Perception: Oral</p>	<p>Identify shapes placed in their mouth</p>	<p>Distinguishing and managing different types of food; moving food around in one's mouth; feeling where to move the brush to clean all teeth; knowing where to place the tongue and lips to make specific sounds; being able to blow out candles or suck through a straw</p>	
<p>20</p> <p>Sensory Reactivity</p>	<p>React typically to a variety of sensations, without signs of distress</p>	<p>Engaging in a variety of occupations across settings (e.g., going to baseball game, eating in a restaurant, using public restrooms, enjoying an amusement park, attending a birthday party) without discomfort or irritation from sensations that are not typically bothersome or irritating</p>	

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