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SENSORY PROCESSING INVENTORY FOR CHILDREN WITH GIFTEDNESS/HIGH ABILITY (HA/G) AND TWICE-EXCEPTIONALITY (2e)

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SCORING SHEET

IDENTIFICATION

Child/Adolescent's Name: _____

Date of Birth: ____ / ____ / _____

Age: _____

Evaluator's Name: _____

Profession: _____

Date of Assessment: ____ / ____ / _____

Parent(s)/Guardian(s): _____

Respondent (Interviewee): _____

RESPONSE KEY

☐ **2 – YES**

The behavior is frequently observed. (2 points)

☐ **1 – SOMETIMES**

The behavior occurs in specific situations. (1 point)

☐ **0 – NO**

The behavior is not observed. (0 points)

Administration

The **Sensory Processing Inventory** should be administered by Occupational Therapists and other qualified Health or Education professionals through an interview with the child's or adolescent's parent, legal guardian, or primary caregiver.

SENSORY PROCESSING INVENTORY FOR CHILDREN AND ADOLESCENTS WITH GIFTEDNESS/HIGH ABILITY AND TWICE-EXCEPTIONALITY (2e)

1. TACTILE SYSTEM (21 items)

1. Demonstrates discomfort during personal care activities (haircuts, hair/face washing, nail trimming).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

2. Becomes irritated when wearing shoes and/or socks.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

3. Displays intense emotional or aggressive responses when touched.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

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4. Becomes anxious when in close physical proximity to other people.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

5. Rubs or scratches the area of the body where touched.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

6. Appears not to perceive pain appropriately.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

7. Appears not to notice changes in temperature.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

8. Appears unaware that their hands are dirty.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

9. Frequently bumps into objects or people.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

10. Withdraws when lightly touched.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

11. Appears unaware of being touched.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

12. Avoids touching or playing with paint, glue, sand, modeling clay, slime, or similar materials.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

13. Demonstrates greater-than-expected discomfort during tooth brushing.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

14. Seeks sensations that may be painful (e.g., hitting themselves or intentionally falling).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

15. Demonstrates discomfort when hands or face are dirty.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

16. Refuses to wear costumes or tight-fitting clothing (e.g., turtlenecks or high collars).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

17. Demonstrates a high tolerance for pain.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

18. Demonstrates food selectivity, feeding difficulties, or food refusal.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

19. Demonstrates discomfort with specific food textures.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

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20. Eats only a limited variety of foods.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

21. Places non-food items (e.g., glue, paint, or objects) into the mouth.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Tactile System Score: _____

2. PROPRIOCEPTIVE SYSTEM (13 items)

22. Appears to have reduced muscle strength or low muscle tone.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

23. Appears clumsy.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

24. Requires weighted blankets to sleep.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

25. Walks with stiff or rigid movements.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

26. Grasps objects with excessive force.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

27. Grasps objects with insufficient force.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

28. Seeks activities involving pushing, pulling, carrying heavy objects, or jumping.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

29. Jumps excessively.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

30. Pushes or hits other children.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

31. Places objects in the mouth more frequently than expected for their age.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

32. Chews on toys, clothing, or other objects.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

33. Breaks objects due to the excessive use of force.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

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34. Experiences frequent falls.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Proprioceptive System Score: _____

3. VESTIBULAR SYSTEM (5 items)

35. Demonstrates excessive fear of movement (e.g., stairs, swings, or slides).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

36. Falls off the chair when changing position.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

37. Does not become dizzy in situations where dizziness would typically be expected (e.g., after spinning activities).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

38. Becomes uncomfortable when the head tilts or moves away from the upright position.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

39. Demonstrates poor motor coordination.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Vestibular System Score: _____

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4. INTEROCEPTIVE SYSTEM (10 items)

40. Has difficulty recognizing feelings of hunger, thirst, or satiety.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

41. Recognizes the need to use the bathroom only at a late stage.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

42. Has difficulty recognizing bodily signs of fatigue.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

43. Experiences intense emotional outbursts without noticeable warning signs.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

44. Has difficulty recognizing signs of sleepiness.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

45. Has difficulty initiating or maintaining sleep.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

46. Experiences insomnia.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

47. Exhibits bruxism (teeth grinding).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

48. Becomes more irritable, anxious, or agitated during the evening.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

49. Has difficulty recognizing pain and changes in temperature.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Interoceptive System Score: _____

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5. AUDITORY SYSTEM (7 items)

50. Reacts intensely to unexpected sounds (e.g., sirens, hair dryers, or doorbells).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

51. Covers the ears with the hands in response to certain sounds.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

52. Becomes easily distracted by surrounding noises.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

53. Demonstrates discomfort with common household sounds.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

54. Reacts negatively to loud sounds.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

55. Demonstrates an intense interest in, or discomfort with, subtle sounds.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

56. Is easily distracted by environmental noise.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Auditory System Score: _____

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6. OLFACTORY SYSTEM (4 items)

57. Rejects certain food-related smells or tastes.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

58. Demonstrates a strong preference for specific flavors.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

59. Smells non-food objects and/or people.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

60. Demonstrates discomfort with subtle odors.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Olfactory System Score: _____

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7. BEHAVIORAL CHARACTERISTICS (23 items)

61. Appears prone to accidents.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

62. Completes written or graphic tasks hastily.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

63. Appears stubborn or uncooperative.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

64. Has temper tantrums.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

65. Demonstrates disproportionate emotional reactions.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

66. Requires support to cope with certain challenges.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

67. Demonstrates specific fears.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

68. Becomes easily frustrated.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

69. Displays intense emotional reactions to situations perceived as unfair or unequal.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

70. Demonstrates pronounced perfectionistic traits.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

71. Frequently feels bored.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

72. Interacts more comfortably with adults than with peers.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

73. Has emotional outbursts when unable to complete tasks.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

74. Questions rules that are perceived as unfair.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

75. Has difficulty socializing with peers.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

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76. Has difficulty sustaining attention on tasks perceived as meaningless.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

77. Frequently switches from one activity to another (low tolerance for repetition).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

78. Procrastinates.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

79. Demonstrates exceptional creativity (original or innovative solutions).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

80. Demonstrates advanced memory skills.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

81. Demonstrates hyperfocus (intense concentration on specific topics).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

82. Demonstrates heightened sensitivity to the emotional climate and surrounding environment.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

83. Frequently asks questions.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Behavioral Characteristics Score: _____

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8. PRAXIS – IDEATION, MOTOR PLANNING, AND EXECUTION (7 items)

84. Frequently trips or stumbles.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

85. Avoids motor activities.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

86. Tires quickly during manual tasks.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

87. Has difficulty performing activities of daily living (e.g., buttoning clothes, fastening zippers, tying shoelaces, washing hair, using cutlery, or organizing daily routines).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

88. Has difficulty with handwriting (slow or effortful writing).

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

89. Has difficulty writing in cursive.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

90. Has difficulty participating in ball games.

☐ 2 Yes ☐ 1 Sometimes ☐ 0 No

Praxis Score: _____

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1. SCORE INTERPRETATION

The parameters presented below are intended **solely as interpretive guidelines** to support clinical reasoning. They **do not represent population norms, diagnostic cut-off scores, or standardized scores.**

SENSORY SYSTEM SCORES AND OVERALL SCORE

Sensory System	Maximum Score	0–25% (Within Expected Range)	26–50% (Possible Challenges)	>50% (Clinically Relevant Differences)	Observed Score
Tactile	42	≤11	12–21	≥22	
Proprioceptive	26	≤7	8–13	≥14	
Vestibular	10	≤3	4–5	≥6	
Interoceptive	20	≤5	6–10	≥11	
Auditory	14	≤4	5–7	≥8	
Olfactory	8	≤2	3–4	≥5	
Behavioral Characteristics	46	≤12	13–23	≥24	
Praxis	14	≤4	5–7	≥8	

Overall Child/Adolescent Score

_____ / 180

The score thresholds were established proportionally according to the maximum score for each domain, rounded to whole numbers in order to preserve proportional consistency across all sensory systems evaluated.

1.1 Interpretation by Sensory System

- **0–25% of the maximum score:** Within the expected range, considering typical developmental variability.
- **26–50% of the maximum score:** Indicates possible sensory processing challenges.
- **Above 50% of the maximum score:** Suggests clinically relevant sensory differences with potential functional impact.

1.2 Interpretation of the Overall Score

- **0–45 points:** Sensory profile within the expected range.
- **46–90 points:** Evidence of emerging sensory processing challenges.
- **91–135 points:** Consistent sensory differences with potential functional impact.
- **Above 135 points:** Significant sensory differences with probable functional impact.

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2. IMPORTANT INTERPRETIVE NOTE

Interpretation of the results should consider the complete response profile, the individual's developmental context, family and school environments, as well as the child's or adolescent's strengths, interests, and unique characteristics.

Elevated scores in one or more sensory systems **do not constitute a diagnosis.** Rather, they indicate the need for comprehensive clinical investigation and follow-up by appropriately qualified professionals.

3. SPECIFIC NOTE

Behavioral Characteristics Domain

This domain encompasses both behavioral manifestations associated with difficulties in self-regulation and adaptation, as well as characteristics frequently observed in individuals with **Giftedness/High Ability**, such as **hyperfocus, exceptional creativity, and advanced memory**.

Accordingly, this domain should always be interpreted alongside the remaining sensory systems and within the context of the child's or adolescent's overall functional profile.

4. NATURE OF THE INSTRUMENT

The **Sensory Processing Inventory** is a structured instrument designed for **clinical screening and observational assessment.**

It **is not a diagnostic instrument.**

Its purpose is to support clinical reasoning, guide referrals, and promote a broader understanding of the child's or adolescent's functional profile.

5. ABOUT THE AUTHOR

Letícia Cançado C. Magalhães, OT

CREFITO-4 Registration No. 8188/OT (Brazil)

Letícia Cançado C. Magalhães has been an Occupational Therapist for more than twenty years, with extensive clinical experience in child development and neurodevelopment.

She completed a Residency in Pediatric and Adult Neurofunctional Rehabilitation at **AACD – São Paulo**, where she gained advanced clinical expertise in highly complex rehabilitation settings.

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She has completed formal training in the **Bobath Neurodevelopmental Treatment (NDT) Concept** for both pediatric and adult populations, holds a postgraduate specialization in **Upper Limb Rehabilitation** recognized by the Brazilian Ministry of Education (MEC), and is certified in **Ayres Sensory Integration®**, also recognized by MEC.

She is currently pursuing postgraduate studies in **Giftedness and Twice-Exceptionality (2e).**

Her clinical practice is grounded in the integration of scientific evidence, functional performance, and therapeutic alliance, with a strong emphasis on recognizing and fostering the unique strengths and potential of every child.