

SPM™-2

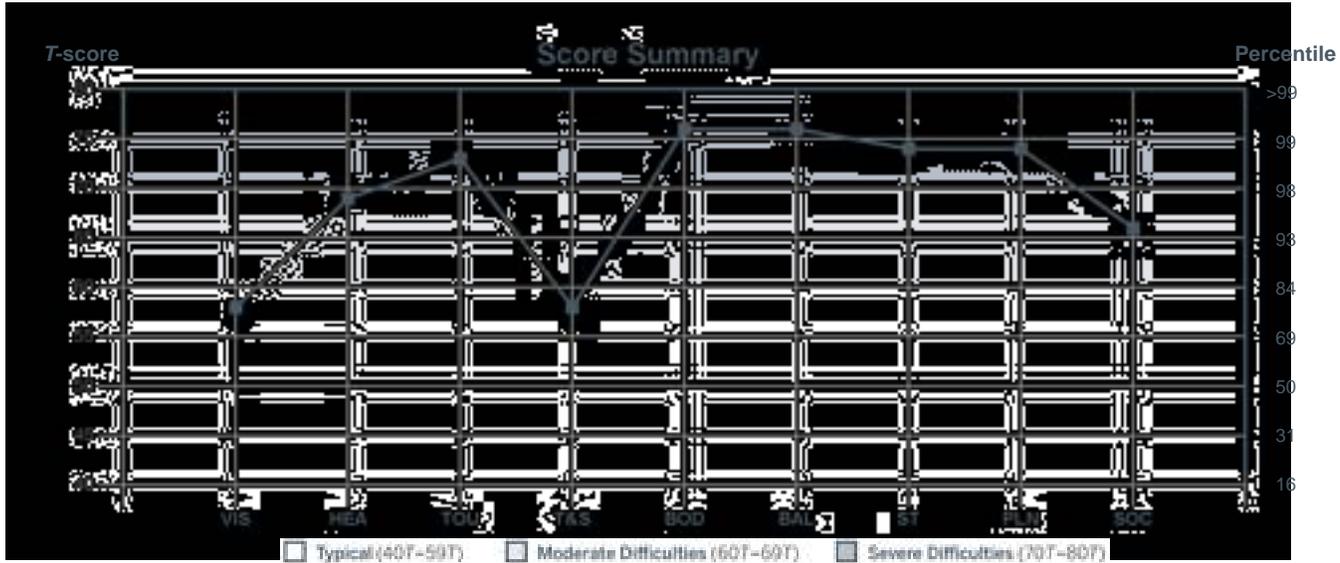
Sensory Processing Measure, Second Edition

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Name of child being evaluated	Gender	Date of birth	Date of testing	Age
Olivia Sample	Female	10/04/2016	03/15/2021	4 years 5 months
Preschool/Day care/Agency	Date of processing			
Sample School	06/24/2021			
Rater's name	Rater's relationship to child being evaluated			
Andrea	Mother			

	VIS	HEA	TOU	T&S	BOD	BAL	ST	PLN	SOC	
Raw score	19	29	34	16	39	28	165	36	29	Raw score
T-score	58	69	73	58	76	76	74	74	66	T-score
%ile	79	97	99	79	>99	>99	99	99	95	%ile
Interpretive range	Typical	Moderate Difficulties	Severe Difficulties	Typical	Severe Difficulties	Severe Difficulties	Severe Difficulties	Severe Difficulties	Moderate Difficulties	Interpretive range

VIS = Vision; HEA = Hearing; TOU = Touch; T&S = Taste and Smell; BOD = Body Awareness; BAL = Balance and Motion; ST = Sensory Total; PLN = Planning and Ideas; SOC = Social Participation



Interpretive Guide

The SPM-2 interpretive guide provides general guidelines to assist the user in developing an initial interpretation. As such, these guidelines give general interpretations that may be relevant to multiple age levels. Therefore, before making a final interpretation, the user should carefully review the multistep interpretive process detailed in Chapter 3 of the SPM-2 Manual (WPS Product No. W-706M). As with any assessment tool, no clinical decisions should be made solely on the basis of the SPM-2 without considering the widest possible range of information sources.

The following guidelines are based on the interpretive ranges associated with this client's *T*-score on each SPM-2 scale.

Typical range (*T*-score: 40–59)

A score in the Typical range indicates behavioral and sensory functioning within the average range. Although some behaviors may be scored above the median item score, problems are generally within the typical range of functioning for most people in that age level, represented by the standardization sample described in Chapter 4 of the SPM-2 Manual.

Moderate Difficulties range (*T*-score: 60–69)

A score in the Moderate Difficulties range indicates mild to moderate difficulties in behavioral or sensory functioning. When a client scores in the Moderate Difficulties range on any scale, it is important to examine the item responses to determine whether there is a consistent pattern of *Occasionally* and *Frequently* ratings, or whether the score is elevated due to a few *Always* ratings for one type of sensory processing issue. That is, the Moderate Difficulties range may indicate occasional negative reactions to a wide range of sensory inputs, or it may represent stronger negative responses to specific types of sensory stimuli or experiences. These item ratings may suggest specific sensory integration or processing vulnerabilities to target for intervention (e.g., over-reactivity to tactile stimulation).

Severe Difficulties range (*T*-score: 70–80)

A score in the Severe Difficulties range indicates a significant sensory processing or behavioral problem that may have a noticeable effect on the client's daily functioning. Depending on the overall SPM-2 results, such difficulties may manifest across multiple sensory systems and multiple environments. Therefore, in order to clarify which sensory integration or processing vulnerabilities are in most immediate need of intervention, it is important to identify individual item responses that elevated the client's score.

Vision

The VIS scale items measure a range of visual processing challenges, including over- and under-reactivity to visual stimulation, excessive seeking of visual input, problems with perception, and ocular-motor difficulties thought to affect the integration of visual with vestibular and proprioceptive information.

A score in the Typical range indicates that this client's overall level of functioning falls within the average range, in comparison to others in this age level.

Hearing

The HEA scale items measure a range of auditory processing challenges, such as over- and under-reactivity, auditory-seeking behavior, and perception problems.

A score in the Moderate Difficulties range may indicate that this client has occasional negative reactions to a wide range of auditory inputs, is easily distracted by auditory stimuli, or demonstrates strong negative responses to specific types of auditory stimuli. In some cases, under-reactivity may lead to failure to notice sounds, or seeking out intense auditory experiences.

Touch

The TOU scale items measure a range of tactile processing challenges, such as over- and under-reactivity to tactile stimulation, tactile-seeking behaviors, and perception.

A score in the Severe Difficulties range is likely to indicate consistent and significant difficulties processing tactile information, or frequent negative reactions to a wide range of tactile inputs. If the score elevation reflects ratings on the under-reactivity items, the client may fail to notice tactile sensations, which may interfere with social relationships or intimacy, or may pose safety concerns, such as not noticing pain from an injury, or having a very delayed or minimal response to injury. If the score elevation reflects ratings on the over-reactivity items, the client may avoid tactile experiences, such as incidental contact with other people in a crowd, to the point that it interferes with social participation. It may indicate strong or frequent negative reactions to tactile inputs, such as avoidance of clothing with seams that contact the skin, or refusal of foods with certain textures. Clients who score in the Severe Difficulties range may struggle with both tactile reactivity and tactile perception.

Taste and Smell

The T&S scale items measure a range of taste and smell processing challenges, such as over- and under-reactivity to smells or tastes, active seeking of taste or smell stimuli, and perception of taste or smell sensations.

A score in the Typical range indicates that this client's overall level of functioning falls within the average range, in comparison to others in this age level.

Body Awareness

The BOD scale items measure body awareness, or *proprioception*, a client's ability to sense precisely both the static position and dynamic changes in the position of limbs, fingers, and other body parts.

A score in the Severe Difficulties range likely indicates frequent and consistent problems in many aspects of proprioceptive processing and body awareness. Clients who score in this range are likely to appear very clumsy or uncoordinated and may be too rough when touching people or handling objects. They may be misinterpreted as aggressive, for example, when touching or pushing others too forcefully due to a lack of refined movement rather than an intent to harm. Additionally, they may excessively hug or wrestle others in order to experience strong proprioceptive inputs, which may result in reprimands or avoidance from others. Clients with severe proprioceptive difficulties may be unable to effectively regulate the force of their own actions, making participation in activities that require refined and coordinated movement of body parts or manipulation of objects very difficult. When using too much force, they may accidentally break objects, which may lead others to view them as intentionally destructive. Alternatively, they may not use enough force, resulting in dropped objects or inadequate motor skills when doing tasks such as handwriting, or attempting to use tools such as shovels or scissors. Additionally, proprioceptive-seeking behavior is often noted in individuals with over-reactivity in other senses. Such co-occurrence may not reflect a difficulty with proprioception so much as the use of intense proprioceptive inputs to minimize or block out other sensory inputs. Thus, the evaluator should examine items in the other sensory system scales to determine whether over-reactivity in those systems may be contributing to proprioceptive-seeking behaviors.

Balance and Motion

The BAL scale items measure a client's *vestibular* function, or their balance and equilibrium while sitting, standing still, or in motion. BAL items also measure over- or under-reactivity to sensations of moving through space.

A score in the Severe Difficulties range usually indicates multiple difficulties with movement and balance, as well as with postural control. Consequently, clients who score in this range may avoid situations involving even mild movement through vertical space, such as climbing up or stepping down stairs or a ladder, and may consistently refuse activities that challenge their balance and postural control, such as sitting on a bench with no back support or walking on a narrow surface. Some display excessive fear of having one foot off the ground momentarily, especially when moving through vertical space, such as walking up stairs. Conversely, some clients may seek out excessive amounts of intense movement through space, such as body rocking, long bouts of trampoline jumping, or fast driving.

Sensory Total

The Sensory Total (ST) score is a composite score that includes all of the items from the six sensory system scales (VIS, HEA, TOU, T&S, BOD, BAL). The ST score is useful when a single score that represents overall functioning in sensory integration and processing is needed. It is important to note that the ST does not measure praxis or social participation, which are measured by the PLN and SOC scales, respectively. In general, the individual sensory systems scales are more useful clinically than ST alone, as they provide more specific information for intervention planning.

A score in the Severe Difficulties range indicates that the client's sensory functions are significantly affected and most likely have a profound impact on daily life participation. When the ST score is in the Moderate Difficulties or Severe Difficulties range, the evaluator should examine all *T*-scores to identify the specific sensory systems that fall at or above a *T*-score of 60; examine the specific items in each scale that contributed to the high scores; and then consider how sensory processing in vulnerable systems may be affecting the client's daily life, particularly in relation to the reasons for referral. Additionally, if PLN and SOC scores fall above 60, consideration should be given to how sensory strengths and weaknesses may be affecting praxis and/or social participation.

Planning and Ideas

The PLN scale items measure a client's *praxis*, or the ability to conceptualize, plan, and organize movements in order to complete unfamiliar motor tasks. Praxis is not a sensory system, but a higher level function that depends on the integration of multiple sensory systems.

A score in the Severe Difficulties range usually indicates consistently impaired performance in many activities that require ideation or motor planning. Clients who score in this range may not know how to manipulate a new tool or object, or how to begin and sequence the actions necessary to perform a new task, especially if multiple steps are involved. They may resist or avoid unfamiliar tasks, preferring familiar ways of doing activities and avoiding the challenge of new action strategies. Because praxis is a higher level, integrative process, a PLN score in the Severe Difficulties range usually indicates more severe problems in overall daily functioning than does an elevated score on individual sensory system scales. In addition, a client's score on the PLN scale may be elevated due to cognitive impairment, as praxis is essentially a form of cognition applied to body movement. In interpreting the PLN score, the evaluator should consider medical, developmental, cognitive, and environmental factors that may have an impact on the client's ability to conceptualize, plan, and execute complex motor activities.

Social Participation

The SOC scale items measure a person's participation in social activities in the home, community, or school. The item content addresses general social participation, including items referring to specific aspects of verbal and nonverbal communication, conflict resolution, and flexibility in peer and social interaction.

A score in the Moderate Difficulties range is likely to indicate some difficulties participating with others at home, school, work, and in the community. Maintaining friendships may be difficult. When the SOC score is in the Moderate Difficulties range, it is important that the evaluator identify and reflect on the specific items that contributed to the elevated SOC scale score, in order to gain insight into the kinds of situations that are problematic for the client. Further, it is imperative that the clinician consider how the client's ability to engage with others may be influenced by challenges with sensory processing and/or praxis. Often, difficulties in social-relational skills are related to problems with sensory processing or praxis. For example, a client with an elevated score on SOC may also have elevated scores on one or more of the sensory systems and/or praxis scales. However, a client's score on the SOC scale may also be elevated for reasons unrelated to praxis or sensory integration and processing, for example, communication disorders, very shy temperament, or history of trauma. In interpreting the SOC score, the evaluator should consider the other SPM-2 scores in addition to medical, developmental, cognitive, and environmental factors that may have an impact on social functioning.

Item Responses: Preschool Home Form

This child...

VISION

1. Squints, covers eyes, or complains about bright lighting or sunlight.	Never	(1)
2. Has trouble finding an object among other items.	Occasionally	(2)
3. Stares intently at lights or objects that spin or flash.	Occasionally	(2)
4. Stares intently at people or objects.	Occasionally	(2)
5. Walks into objects or people as if they were not there.	Occasionally	(2)
6. Flips lights on and off repeatedly.	Occasionally	(2)
7. Looks at objects out of the corner of his or her eye.	Occasionally	(2)
8. Is distracted by visible objects or people.	Occasionally	(2)
9. Is bothered by busy visual environments, such as a cluttered room or a store with a lot of items.	Occasionally	(2)
10. Becomes distracted by looking at things while walking.	Occasionally	(2)

This child...

HEARING

11. Is bothered by ordinary household sounds, such as the vacuum cleaner.	Always	(4)
12. Responds to loud noises by running away, crying, or holding hands over ears.	Always	(4)
13. Is distracted or bothered by background noises that others ignore, such as a lawn mower outside or an air conditioner.	Always	(4)
14. Likes making certain sounds over and over again, such as humming or repeatedly flushing the toilet.	Always	(4)
15. Is distressed by shrill sounds, such as whistles or party noisemakers.	Always	(4)
16. Becomes distressed in noisy places, such as a party or a crowded room.	Occasionally	(2)
17. Startles easily at loud or unexpected sounds.	Occasionally	(2)
18. Fails to respond when name is called.	Occasionally	(2)
19. Has difficulty following verbal directions.	Occasionally	(2)
20. Has difficulty determining the location of sounds or voices.	Never	(1)

This child...

TOUCH

21. Pulls away when touched lightly or unexpectedly.	Always	(4)
22. Becomes distressed when someone washes, wipes, or touches face.	Always	(4)
23. Is distressed by having his or her hair cut or brushed.	Always	(4)
24. Seems unaware of the need to use the toilet.	Always	(4)
25. Enjoys sensations that would be painful to others, such as crashing into walls.	Always	(4)
26. Rubs objects repetitively with hands or fingertips.	Always	(4)
27. Gags or vomits in response to foods of certain textures.	Always	(4)
28. Fails to clean saliva or food from face.	Always	(4)
29. Likes to lie under heavy things, such as blankets, pillows, or couch cushions.	Never	(1)
30. Rejects foods with mixed textures, such as yogurt with fruit.	Never	(1)

Summary of Test Data Entry: Preschool Home Form

Name of child being evaluated	Gender	Date of birth	Date of testing	Age
Olivia Sample	Female	10/04/2016	03/15/2021	4 years 5 months
Preschool/Day care/Agency	Date of processing			
Sample School	06/24/2021			
Rater's name	Rater's relationship to child being evaluated			
Andrea	Mother			

Comments on behavior/functioning:

Item responses:

VIS		HEA		TOU		T&S		BOD		BAL		PLN		SOC	
1.	N (1)	11.	A (4)	21.	A (4)	31.	A (4)	41.	A (4)	51.	A (4)	61.	A (4)	71.	N (4)
2.	O (2)	12.	A (4)	22.	A (4)	32.	F (3)	42.	A (4)	52.	A (4)	62.	A (4)	72.	N (4)
3.	O (2)	13.	A (4)	23.	A (4)	33.	O (2)	43.	A (4)	53.	A (4)	63.	A (4)	73.	N (4)
4.	O (2)	14.	A (4)	24.	A (4)	34.	N (1)	44.	A (4)	54.	A (4)	64.	A (4)	74.	N (4)
5.	O (2)	15.	A (4)	25.	A (4)	35.	N (1)	45.	A (4)	55.	A (4)	65.	A (4)	75.	N (4)
6.	O (2)	16.	O (2)	26.	A (4)	36.	N (1)	46.	A (4)	56.	A (4)	66.	A (4)	76.	N (4)
7.	O (2)	17.	O (2)	27.	A (4)	37.	N (1)	47.	A (4)	57.	N (1)	67.	A (4)	77.	F (2)
8.	O (2)	18.	O (2)	28.	A (4)	38.	N (1)	48.	A (4)	58.	N (1)	68.	A (4)	78.	A (1)
9.	O (2)	19.	O (2)	29.	N (1)	39.	N (1)	49.	A (4)	59.	N (1)	69.	O (2)	79.	A (1)
10.	O (2)	20.	N (1)	30.	N (1)	40.	N (1)	50.	F (3)	60.	N (1)	70.	O (2)	80.	A (1)

Scales:

VIS	=	Vision
HEA	=	Hearing
TOU	=	Touch
T&S	=	Taste and Smell
BOD	=	Body Awareness
BAL	=	Balance and Motion
PLN	=	Planning and Ideas
SOC	=	Social Participation

Item response key:

N	=	Never
O	=	Occasionally
F	=	Frequently
A	=	Always
-	=	response missing

* Median value was used for missing response.

Note: Raw score value is in parentheses.

Scoring is reversed on these items:

71,72,73,74,75,76,77,78,79,80.

Number of missing responses = 0